I590-I690 Structured Conceptual Design (Summer 2010)
Indiana University School of Informatics
Dr. Davide Bolchini

Assignment 4

Final IDM Project – Advanced IDM Visualization

An exercise in Advanced IDM Visualization, along with corresponding Logical and Page IDM Descriptions, for a proposed Indiana-specific microbrewery products web site.

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PROJECT INTRODUCTION

This project will discuss a proposed web site design for individuals wanting to learn more about the microbrew industry within Indiana. It is envisioned the site will include topics such as varieties of beers, .breweries throughout the state, locations to purchase and/or sample microbrewery products, and various events supporting the safe experimentation and learning process of microbrewing.

Key Stakeholders:

- Individual Consumers: A visitor should have a simple, yet enjoyable, experience browsing the web site in search for microbrew information, including styles and types of microbrew beers available, the breweries themselves, and information on tasting events throughout the state.

- Indiana Microbreweries: Microbreweries will be able to properly advertise both their varieties of microbrew beers, the brewery itself (such as hours, tours, purchases), and events they plan to participate in so that new customers can try their product and learn of their history & brewing process.

Website Goals:

- To provide web site visitors with information regarding individual microbrews created in Indiana, including locations to consume onsite and/or purchase.

- To provide web site visitors brewery information and locations.

- To provide web site visitors with a list of microbrew events around the state, including tastings, festivals, educational classes, etc.

User Profiles & Scenarios:

- Scott: 29-year-old married male. Television producer for a public television broadcasting company. Enjoys trying different microbrewery beers.

- Roger: 57-year-old retired married male. He brews his own beer as a hobby, and enjoys meeting other fellow home brewers for tips, techniques, and potential recipe ideas.

As the best man for an upcoming wedding for a college roommate, Scott has been put in charge of making arrangements for his friend's bachelor party activities. He has already secured hotel rooms in downtown Indianapolis, and is investigating ideas. Scott knows his friends are also casual beer drinkers (including one friend whom brews his own beer), and enjoy trying new beers. He believes a special tasting session at one of the downtown breweries would be interesting to try. He enters the web site and reviews a list of breweries located in Indianapolis. He chooses Sun King Brewery, one of his favorite breweries, to review hours of operation and contact information. Scott then reviews the events Sun King will be participating in, and notices a tasting festival during the proposed weekend. He informs the group of his findings, and contacts Sun King Brewery to purchase festival tickets.

Roger has been brewing beer for over ten years, and thoroughly enjoys the hobby. He thinks he has a good recipe for two varieties of personalized beer, but is curious to try other recipes and techniques to help support his hobby interests. He has a keen interest in discovering a recipe or brewing technique for a porter or rye-based beer. He has become friends with a number of local brew masters in Muncie, and would like to see if they may be offering courses in advanced brewing methodologies which might include such techniques. Roger opens the web site and proceeds to the list of Indiana microbrews. He pairs down his selection to only include Porters and Stout beers. From the list, he notes that the local Half Moon Brewery has just introduced a Porter beer, and has scheduled a introduction tasting session benefiting a local non-profit, which including open discussions with the creator and brew master next week. He also discovers a class in advanced brewing techniques is also being held at the brewery in August, with home brewers cordially invited. Roger contacts the brewery and registers for both the tasting session and the brewing technique course.

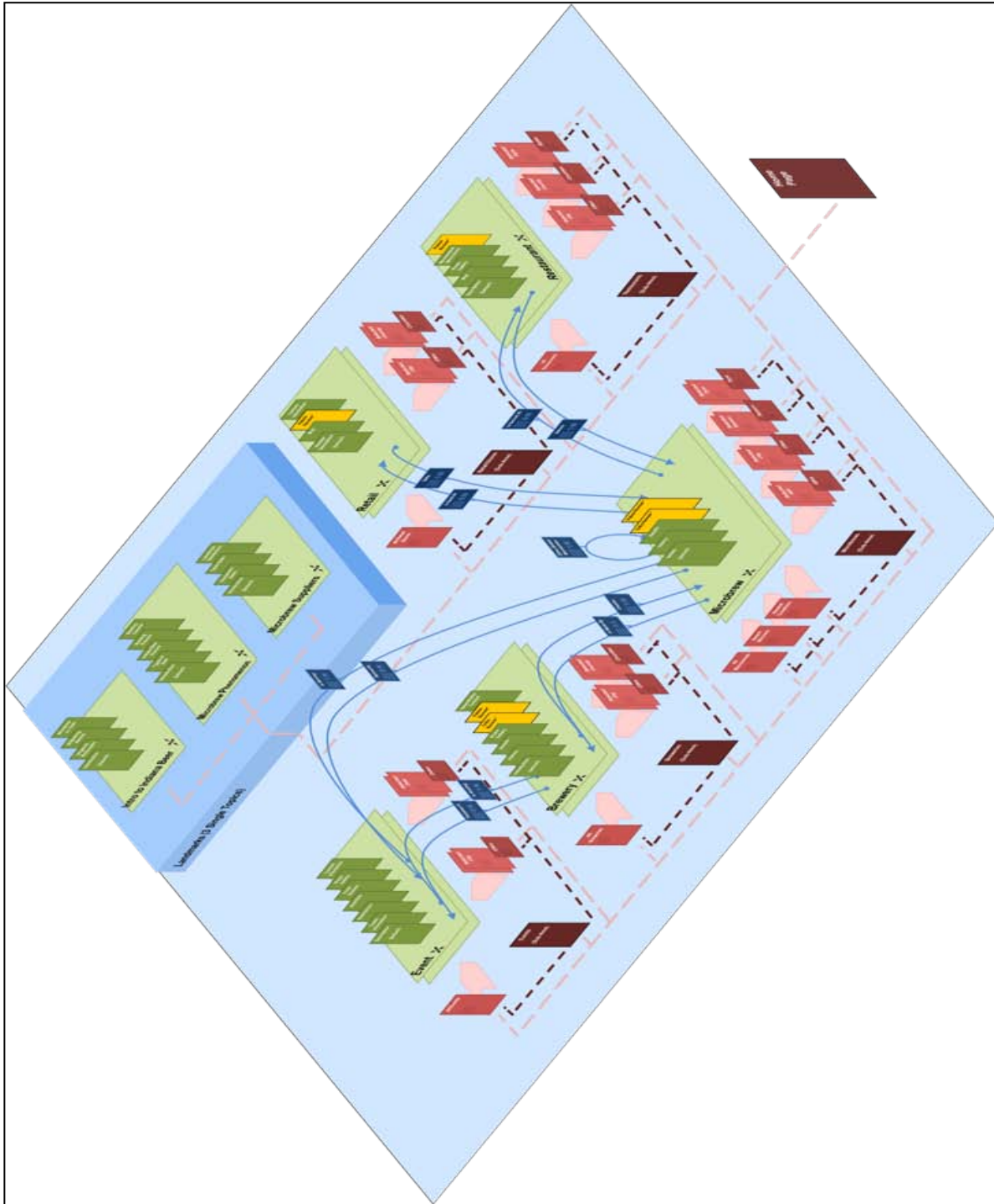## ADVANCED IDM REPRESENTATION – CONCEPTUAL & LOGICAL DESIGN

Figure L-IDM #1: Advanced L-IDM Design Layout
(please see corresponding PPT/PDF for detailed information)

IDM LOGICAL DESIGN DEFINITIONS

SINGLE TOPICS (3)

Topic Name: Microbrew Phenomenon
Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
Introduction	Quick paragraph to hook visitors into finding out more about the microbrewing phenomenon, reading more about how it's done, its popularity and simplicity, and how it has really taken off in the state of Indiana itself.
Origins & Philosophy	Couple paragraphs describing what caused the recent influx of microbreweries throughout the US and the world, including when the trend started upwards, what constitutes a microbrew, market share information, etc.
Microbrew History for Indiana	Perhaps similar to the Origins & Philosophy section, but specifically concentrating information for the state of Indiana, such as the first microbrewery in Indiana, total microbreweries, home brewing, health of the industry, market share, etc.
Microwbrew vs. Craft	A couple of paragraphs describing the perceived differences between a microbrew and a craft beer. Section to be discussed and agreed-to by participating microbreweries and brew masters.

Topic Name: Introduction to Indiana Beer
Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
Introduction	A couple small paragraphs introducing the single topic as a high-level overview of beer and the brewing process, making note that sections may highlight Indiana-specific interests.
Types of Beer	Short, but comprehensive, description of the beer types found at most Indiana microbreweries, such as ales, stouts, porters, lagers, etc., and what to look/smell/sense for in each.
Indiana Beer Flavors	Small section describing some of the different flavors that Indiana breweries have found as signature flavors, such as grains, accents, etc.
Brewing Process	A step-by-step path describing how beer is created. This specific dialogue may be accessed via the all-to-all pattern, but may be internally traversed linearly.
Brewing Classes	A list of various locations (breweries, organizations, etc.) where people can learn how to brew their own beers, along with contact information, websites, etc.

Topic Name: Indiana Microbrew Suppliers

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
<u>Introduction</u>	Quick introduction stating various supplies are needed to create & preserve microbrew and/or homebrewed beers. Section should reassure both hobbyists and microbrewmasters the section can be used by everyone, not just one or the other.
Equipment Sales	A list of various locations where people can purchase necessary equipment used to create beer (such as kegs, stills, bottles, etc.), along with contact information, websites, etc.
Grain Sales	A list of grain manufactures where people can purchase the necessary ingredients needed for brewing beer (hops, barley, yeast, etc.), along with contact information, websites, etc.
Labeling & Distribution	A list of various labeling, marketing, and distributors for home brewers and microbrewers. Section may be more for breweries, though some home brewers may want to create their own beer labels and cartons.

MULTIPLE TOPICS (5)

Topic Name: Microbrew

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
<u>Details</u>	Provided by the microbrewery. Description of the individual microbrew itself, including label, season (if necessary), ABV, etc.
History	Provided by the microbrewery. Description of what went into the creation of the microbrew. "Stories behind the beer"
Awards	A list of individual awards given to an individual microbrew, including award level, location, year, and perhaps award description review.
Critic Review *	*Multiple Dialogue Act.* A number of reviews by beer critics to an individual microbrew listing. Dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description. Should probably contain references to reviewer, including source, web site, contact information, etc.
Patron Review *	*Multiple Dialogue Act.* A number of reviews by visitors to an individual microbrew listing. Guessing the dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description.

Topic Name: Brewery

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
Introduction	A couple of paragraphs describing the individual brewery and its current status, including map & directions.
History	A brief history of the brewery, as provided by the brewery itself.
Awards	A list of individual awards given to a brewery, including award level, location, year, and perhaps award description review. Could also list off awards provided to individual beers (current & retired).
Photo Gallery	Several pictures of the brewery itself, along with amenities (if supplied). Could also have several patron-specific pictures. Would assume section would be hyperlinks to a photo gallery guided tour layered construct.
Critic Review *	*Multiple Dialogue Act.* A number of reviews by beer critics to a brewery. Dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description. Should probably contain references to reviewer, including source, web site, contact information, etc.
Patron Review *	*Multiple Dialogue Act.* A number of reviews by visitors to a brewery. Guessing the dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description.
Brew Master Contact	Information on the brewery Brew Master(s) and how to contact them if desired.

Topic Name: Event

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
Description	A description of the event a brewery is participating in and/or where a microbrew is being served at. Will contain high-level information including dates/times, costs, etc.
Ticket Information	Contains information to the purchase of event tickets (if needed), including ticket level pricing.
Restrictions	Contains information specific to restrictions for the event, such as pets allowed, children allowed, etc.
Activities	A list of all activities being offered at the event, including the microbrew tasting/serving. Activities such as musical acts, games, carnival rides, discussions, etc. will be listed here
Food Vendors	A list of participating food vendors (if any) at the event. Food vendors may only be supplying a limited menu, so if desired, a list of the menu items specific for the event can be added (along with cost)
Photo Gallery	Several pictures from past instances of the event itself, as supplied by the event coordinators. Example: the 2010 event may have displayed 2009 pictures. Would assume section would be hyperlinks to a photo gallery guided tour layered construct.
Contact Information	Contact information for the event coordinator, including name, address, phone number, e-mail, etc.

Topic Name: Restaurant

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
<u>Description</u>	A couple of paragraphs describing the individual restaurant, including restaurant style, atmosphere, family-orientation, etc.
Map	Display a scalable map (Google/Bing/Yahoo – TBD) indicating location of restaurant. Map will be linkable to open separate browser window for visitor to coordinate driving directions from his/her current location.
Photo Gallery	Several pictures of the restaurant itself, along with amenities (if supplied). Could also have several patron-specific pictures. Would assume section would be hyperlinks to a photo gallery guided tour layered construct.
Recommended Menu Items	If restaurant is accessed via a selected microbrew, a list of all recommended menu items for that microbrew is displayed. If restaurant is accessed via introductory act, a list of menu items is displayed along with recommended microbrews for each item.
Patron Review *	*Multiple Dialogue Act.* A number of reviews by visitors to an individual restaurant serving a microbrew. Guessing the dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description.

Topic Name: Retail

Structural Strategy Navigation Pattern: All-to-All

Content-Dialogue Act	Description
<u>Retailer Description</u>	A couple of paragraphs describing the individual retail store, including description of store (grocery, liquor, supermarket, etc.), hours of operation, etc.
Map	Display a scalable map (Google/Bing/Yahoo – TBD) indicating location of retailer. Map will be linkable to open separate browser window for visitor to coordinate driving directions from his/her current location.
Patron Review *	*Multiple Dialogue Act.* A number of reviews by visitors to an individual microbrew retailer. Guessing the dialogue will contain at least a 1-5 star rating, a quick 30-character heading, and a 500-character rating description.
Contact Information	Contact information for the retailer, including name, position, phone number, e-mail, etc.

TRANSITION DIALOGUE ACTS (10)

<u>Note</u>: The transition from Microbrew to Brewery is not documented by design. The cardinality of this transition is strictly 1:1 (A specific microbrew is only brewed by one brewery). There is no separate transition dialogue act necessary. The user will traverse this transition directly from the individual instantiation of microbrew to the individual instantiation of the corresponding brewery. This transition IS documented in the Advanced Logical IDM Diagram, showing the 1:1 cardinality.

"Other Similar Microbrews" (Relation between Microbrew & Microbrew)

Introductory Content	A quick mention of all microbrew varieties similar to the one currently selected (TBD. Could be by beer type (lager, ale, porter, etc.) or other means.
Organization	List of all designated similar microbrew varieties, in alphabetical order by variety name, along with the brewery name producing that variety. Microbrew name itself will be the hyperlink. Cardinality will be 1:N, as there should be at least one microbrew similar to the selected variety
Navigation Strategy	Index navigation pattern

"Creates" (Relation between Brewery & Microbrew)

Introductory Content	List of al microbrews produced by the currently selected brewery.
Organization	List of all microbrews produced by the selected brewery, sorted in alphabetical order by microbrew name. Display *could* also display beer type (lager, ale, porter, etc.), and perhaps another brief descriptive statistic (such as ABV or IBU). Cardinality will be 1:N, as each brewery will produce at least one variety of microbrew.
Navigation Strategy	Index navigation pattern

"Partakes In" (Relation between Brewery & Event)

Introductory Content	Quick introduction stating the brewery is currently scheduled to attend the following events. A brief disclaimer should be provided to instruct user to contact the brewery for confirmation.
Organization	List of all events, event dates, and event locations the selected brewery will be attending. Event name will be the hyperlink to the event content itself. List of events will be displayed *in alphabetical order by date*, rather than just alphabetically, although a sorting mechanism may also be incorporated into the transition page. Cardinality is 0:N, as the selected brewery may not have any events scheduled for attending.
Navigation Strategy	Index navigation pattern

"Is Hosting" (Relation between Event & Brewery)

Introductory Content	Disclaimer to state list of scheduled brewery representation is tentative, and that visitor should contact either the event coordinator or the brewery in question to confirm attendance.
Organization	Alphabetical list of all participating breweries scheduled to attend the event. May also display brewery's location (Indianapolis, Lafayette, Muncie, etc.). Brewery name to be the hyperlink. Cardinality is 1:N, as there will be at least one brewery listed for each event.
Navigation Strategy	Indexed navigation pattern.

"Served At" (Relation between Microbrew & Event)	
Introductory Content	Disclaimer should be provided to instruct user to contact the either event coordinator or desired brewery to confirm specific microbrew being served at event
Organization	List of all events, event dates, and event locations the selected microbrew will be served at. Event name will be the hyperlink to the event content itself. List of events will be displayed *in alphabetical order by date*, rather than just alphabetically, although sorting mechanism may be incorporated into the transition page. Cardinality is 0:N, as the selected microbrew may not currently be scheduled for an event.
Navigation Strategy	Index navigation pattern

"Is Serving" (Relation between Event & Microbrew)	
Introductory Content	Disclaimer to state list of scheduled microbrews is tentative, and that visitor should contact either the event coordinator or the brewery in question to confirm.
Organization	Alphabetical list of all participating microbrews scheduled to be served at the event. May also display brewery name and location. Microbrew name to be the hyperlink. Cardinality is 1:N, as there will be at least one microbrew listed for each event.
Navigation Strategy	Index navigation pattern.

"Is Served At" (Relation between Microbrew & Restaurant)	
Introductory Content	List of all known restaurants currently serving the currently selected microbrew. Disclaimer should be provided for user to contact the individual restaurant to confirm.
Organization	List of all restaurants currently serving the microbrew, in alphabetical order by restaurant name. Restaurant name will be hyperlink to the individual restaurant instance. Additional information, such as city and phone number, could also be provided (non-hyperlinked). Cardinality is 0:N, as the selected microbrew may not be served at any restaurant at the time.
Navigation Strategy	Index navigation pattern

"Serves" (Relation between Restaurant & Microbrew)	
Introductory Content	List of all Indiana microbrews currently being served by the selected restaurant. Disclaimer should be provided for user to contact the individual restaurant to confirm.
Organization	List of all Indiana microbrews currently being served at the restaurant. List is in alphabetical order by microbrew name. Microbrew name is hyperlink to individual instance of microbrew. Additional information on microbrew, such as brewery name and brewery location could also be provided. Cardinality is 1:N, as the restaurant should be serving at least one microbrew listed in the web site.
Navigation Strategy	Index navigation pattern

"Is Sold At" (Relation between Microbrew & Retailer)	
Introductory Content	List of all known retailers currently selling the currently selected microbrew. Disclaimer should be provided for user to contact the individual retailer to confirm.
Organization	List of all retailers currently selling the selected microbrew, in alphabetical order by retailer name. Retailer name will be hyperlink to the individual retailer instance. Additional information, such as city and phone number, could also be provided (non-hyperlinked). Cardinality is 0:N, as the selected microbrew may not be sold at any known retailers at the time.
Navigation Strategy	Index navigation pattern

"Sells" (Relation between Retailer & Microbrew)	
Introductory Content	List of all Indiana microbrews currently being sold by the selected restaurant. Disclaimer should be provided for user to contact the individual retailer to confirm.
Organization	List of all Indiana microbrews currently being sold by the selected restaurant. List is in alphabetical order by microbrew name. Microbrew name is hyperlink to individual instance of microbrew. Additional information on microbrew, such as brewery name and brewery location could also be provided. Cardinality is 1:N, as the retailer should be selling at least one microbrew listed in the web site.
Navigation Strategy	Index navigation pattern

INTRODUCTORY DIALOGUE ACTS (7)

"All Microbrews" (Microbrew Multiple Topic)	
Introductory Content	n/a
Organization	Each line contains the name of a microbrew. Listed in alphabetical order. Could also indicate the brewery and brewery location (non-hyperlinks).
Navigation Strategy	Index navigation pattern, primarily due to quantity of microbrews available in Indiana.

"Recent Award Winners" (Microbrew Multiple Topic)	
Introductory Content	A brief description indicating the displayed list is all Indiana-based microbrews that have won a recent award at a competition or event.
Organization	Each line contains the name of a microbrew. Listed in alphabetical order. Could also indicate the brewery, brewery location, and the award name/date (non-hyperlinks).
Navigation Strategy	Index navigation pattern, primarily due to quantity of microbrews that have won awards.

"Newest Creations" (Microbrew Multiple Topic)	
Introductory Content	A brief description indicating the displayed list is all Indiana-based microbrews that have recently been created / invented by the brewery. A great way to introduce new microbrews to the visiting audience.
Organization	Each line contains the name of a microbrew. Listed in alphabetical order. Could also indicate the brewery and brewery location (non-hyperlinks).
Navigation Strategy	Index navigation pattern, primarily due to quantity of new microbrews available in Indiana.

"All Indiana Breweries" (Brewery Multiple Topic)	
Introductory Content	n/a
Organization	Each line contains the name of an Indiana-based microbrewery. Listed in alphabetical order. Could also indicate the brewery location (non-hyperlink).
Navigation Strategy	Index navigation pattern, primarily due to quantity of microbreweries in Indiana.

"All Participating Events" (Events Multiple Topic)	
Introductory Content	n/a
Organization	Each line contains the name and date of an event (festival, competition, tasting, etc.) to which at least one microbrewery is participating in. *Listed in alphabetical order of the event name by date*. Event name is the access hyperlink. Could also indicate the event location (non-hyperlink).
Navigation Strategy	Index navigation pattern, primarily due to quantity of scheduled events in Indiana.

"All Restaurants" (Restaurant Multiple Topic)	
Introductory Content	n/a
Organization	Each line contains the name of a restaurant serving at least one microbrew. Listed in alphabetical order. Could also indicate the restaurant location and restaurant style (non-hyperlinks).
Navigation Strategy	Index navigation pattern, primarily due to quantity of qualifying restaurants.

"All Retail Stores" (Retail Multiple Topic)	
Introductory Content	n/a
Organization	Each line contains the name of a retail store (grocery, supermarket, liquor, etc.) selling at least one microbrew. Listed in alphabetical order. Could also indicate the store's location (non-hyperlink).
Navigation Strategy	Index navigation pattern, primarily due to quantity of qualifying retail stores.

PARAMETRIC INTRODUCTORY DIALOGUE ACTS (14)

For each Parametric Introductory Act, a parameter value choice will be provided. For purposes of this section, each parametric introductory dialogue act and corresponding value choice will be categorized by the assigned multiple group topic.

MICROBREW MULTIPLE GROUP TOPICS (4)

Parametric Value Choice	
Name	Type
Introductory Content	Recommended quick description of each type of beer. Example: "Ale: An ale beer is …"
Organization	Each line will contain a pre-determined "type" of beer, such as ales, lagers, porters, cask, & stouts (to name a few). List to be determined by submitted beers, and will evolve as necessary. The beer type itself should be the selection hyperlink.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Microbrews by Type
Introductory Content	The introductory act will re-affirm the beer type selection.
Organization	Each line will contain names of individual microbrews for the selected beer type. The list will be in alphabetical order by microbrew name itself. Additional information, such as brewery and brewery city, may also be included, but not hyperlinked.
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	ABV
Introductory Content	ABV stands for Alcohol By Volume, to which many microbrew connoisseurs tend to pay attention to. Probably a quick definition description would be welcomed, especially to those that are unfamiliar with the terminology. Similarly, a description as to average ABV's by beer type may be welcomed as well.
Organization	Each line contains a pre-determined ABV range. Entries will include Non-Alcoholic (> 1%), 1.0-2.9%, 3.0-4.9%, and so on to something10% and over. List will be arranged in ascending order.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Microbrews by ABV
Introductory Content	The introductory act will re-affirm the ABV percentage range selected
Organization	Each line will contain names of individual microbrews for the selected ABV percentage range. The list will be in alphabetical order by microbrew name itself. Additional information, such as brewery and brewery city, may also be included, but not hyperlinked.
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	City
Introductory Content	n/a
Organization	Each line contains an Indiana city name with at least one microbrewery, and thus at least one microbrew, located therein. Listed in alphabetical order. *** Note: This selection may be converted into a Nested Group of Topics if a selection header is implemented. The selection header would contain the standard alphabet (A-Z) to represent the first letter of a city name. Letters with at least one qualifying city would be hyperlinked to the list of qualifying Indiana cities beginning with that letter. Letters with no qualifying Indiana city would be grayed-out and not hyperlinked. By default, the first qualifying city in alphabetical order would have its letter selected. Thus, if Anderson, IN is first alphabetically, all cities starting with A are shown. If Brownsburg, IN is first alphabetically and there are no cities beginning with A, then all cities beginning with B are initially displayed alphabetically.*
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Microbrews by City
Introductory Content	The introductory act will re-affirm the city the visitor selected
Organization	Each line will contain names of individual microbrews that are made in a brewery located in the selected city. The list will be in alphabetical order by microbrew name itself. Additional information, such as brewery name, may also be included, but not hyperlinked.
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	Season
Introductory Content	Brief description of what seasonal beers are, noting their limited availability during off-season periods
Organization	Each line will contain a pre-determined seasonal beer name (such as Spring, Summer, Fall, Winter, Oktoberfest, Year-round, Special Event, etc.). The list should be sub-categorized by seasons vs. year-round vs. special occasions, and then listed alphabetically or in order of calendar season)
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Microbrews by Season
Introductory Content	The introductory act will re-affirm the selected beer season as chosen by the visitor.
Organization	Each line will contain names of individual microbrews that have been categorized by the selected season. The list will be in alphabetical order by microbrew name itself. Additional information, such as brewery name, may also be included, but not hyperlinked.
Navigation Strategy	Index navigation pattern

BREWERY MULTIPLE GROUP TOPIC (2)

Parametric Value Choice	
Name	City
Introductory Content	n/a
Organization	Each line contains an Indiana city name with at least one microbrewery, and thus at least one microbrew, located therein. Listed in alphabetical order. *** Note: This selection may be converted into a Nested Group of Topics if a selection header is implemented. The selection header would contain the standard alphabet (A-Z) to represent the first letter of a city name. Letters with at least one qualifying city would be hyperlinked to the list of qualifying Indiana cities beginning with that letter. Letters with no qualifying Indiana city would be grayed-out and not hyperlinked. By default, the first qualifying city in alphabetical order would have its letter selected. Thus, if Anderson, IN is first alphabetically, all cities starting with A are shown. If Brownsburg, IN is first alphabetically and there are no cities beginning with A, then all cities beginning with B are initially displayed alphabetically.*
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Breweries by City
Introductory Content	The introductory act will re-affirm the city the visitor selected
Organization	Each line will contain name(s) of breweries located in the selected city. The list will be in alphabetical order by brewery name itself.
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	County
Introductory Content	n/a
Organization	Each line contains an Indiana county name with at least one microbrewery, and thus at least one microbrew, located therein. Listed in alphabetical order.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Breweries by County
Introductory Content	The introductory act will re-affirm the county selection
Organization	Each line will contain name(s) of breweries located in the selected county. The list will be in alphabetical order by brewery name. May also contain the brewery's city name as well (non-hyperlink) for clarification purposes, as the selected county may have multiple cities with participating breweries..
Navigation Strategy	Index navigation pattern

EVENT MULTIPLE GROUP TOPIC (3)

Parametric Value Choice

Name	City
Introductory Content	n/a
Organization	Each line contains an Indiana city name with at least one scheduled event with a participating brewery. Listed in alphabetical order.

*** Note: This selection may be converted into a Nested Group of Topics if a selection header is implemented. The selection header would contain the standard alphabet (A-Z) to represent the first letter of a city name. Letters with at least one qualifying city would be hyperlinked to the list of qualifying Indiana cities beginning with that letter. Letters with no qualifying Indiana city would be grayed-out and not hyperlinked. By default, the first qualifying city in alphabetical order would have its letter selected. Thus, if Anderson, IN is first alphabetically, all cities starting with A are shown. If Brownsburg, IN is first alphabetically and there are no cities beginning with A, then all cities beginning with B are initially displayed alphabetically.* |
| **Navigation Strategy** | Index navigation pattern |

Parameter Introductory Act

Name	Events by City
Introductory Content	The introductory act will re-affirm the gender selection for events listed
Organization	Each line will contain names of the event(s), and dates for the selected city. Events will be listed by date in ascending order, and then by event name alphabetically. Event name will be the link to the individual Event instantiation, whereas the date will be for referential purpose only (non-hyperlink).
Navigation Strategy	Index navigation pattern

Parametric Value Choice

Name	County
Introductory Content	n/a
Organization	Each line contains an Indiana county name with at least one scheduled event with a participating microbrew scheduled to attend, and thus at least one microbrew, located therein. Listed in alphabetical order.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act

Name	Events by County
Introductory Content	The introductory act will re-affirm the county selection
Organization	Each line will contain names of the event(s), dates, and cities for the selected Indiana county. Events will be listed by date in ascending order, and then by event name alphabetically. Event name will be the link to the individual Event instantiation, whereas the date and city name will be for referential purpose only (non-hyperlink).
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	Date
Introductory Content	n/a
Organization	Each line contains a date range (Full list TBD), to be listed in ascending order from soonest to farthest away. (Under consideration: This Week, Next Week, Next 2 Weeks, This Month, Next Month, among others)
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Events by Date
Introductory Content	The introductory act will re-affirm the date range selection for events listed
Organization	Each line will contain event names, dates, and city names for the selected date range. Events will be listed by date in ascending order, and then by event name alphabetically. Event name will be the link to the individual Event instantiation, whereas the date and city name will be for referential purpose only (non-hyperlink).
Navigation Strategy	Index navigation pattern

RESTAURANT MULTIPLE GROUP TOPIC (3)

Parametric Value Choice	
Name	City
Introductory Content	n/a
Organization	Each line contains an Indiana city name with at least one restaurant serving an Indiana-based microbrew. Listed in alphabetical order. *** Note: This selection may be converted into a Nested Group of Topics if a selection header is implemented. The selection header would contain the standard alphabet (A-Z) to represent the first letter of a city name. Letters with at least one qualifying city would be hyperlinked to the list of qualifying Indiana cities beginning with that letter. Letters with no qualifying Indiana city would be grayed-out and not hyperlinked. By default, the first qualifying city in alphabetical order would have its letter selected. Thus, if Anderson, IN is first alphabetically, all cities starting with A are shown. If Brownsburg, IN is first alphabetically and there are no cities beginning with A, then all cities beginning with B are initially displayed alphabetically.*
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Restaurants by City
Introductory Content	The introductory act will re-affirm the city selection
Organization	Each line will contain restaurant name(s) located in the selected city serving an Indiana-based microbrew. The list will be in alphabetical order by restaurant name. Restaurant name will link to an instance of the Restaurant multiple topic. May also display address and/or phone number for reference purposes (non-hyperlink).
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	County
Introductory Content	n/a
Organization	Each line contains an Indiana county name with at least one restaurant serving an Indiana-based microbrew. List of counties displayed in alphabetical order.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act	
Name	Restaurants by County
Introductory Content	The introductory act will re-affirm the county selection
Organization	Each line will contain name(s) of restaurants located in the selected county. The list will be in alphabetical order by restaurant name. May also contain the city the restaurant is located in (non-hyperlink) for clarification purposes, as the selected county may have multiple cities with participating breweries..
Navigation Strategy	Index navigation pattern

Parametric Value Choice	
Name	Style
Introductory Content	n/a
Organization	A list of pre-determined restaurant styles will be displayed to the user in alphabetical order. Examples of restaurant styles are family restaurant, steakhouse, gastropub, chain establishments, German, Italian, etc. This list may be broken down into subdivisions, such as nationalities.
Navigation Strategy	Index Navigation Pattern

Parameter Introductory Act	
Name	Restaurants by Style
Introductory Content	The introductory act will re-affirm the style of restaurant selected by the visitor
Organization	Each line will contain restaurant name(s) for the selected restaurant stylew serving an Indiana-based microbrew. The list will be in alphabetical order by restaurant name. Restaurant name will link to an instance of the Restaurant multiple topic. Should also display restaurant city name for reference purposes (non-hyperlink).
Navigation Strategy	Index navigation pattern

RETAIL MULTIPLE GROUP TOPIC (2)

Parametric Value Choice

Name	City
Introductory Content	n/a
Organization	Each line contains an Indiana city name with at least one retail store selling Indiana-based microbrew(s). Listed in alphabetical order. *** Note: This selection may be converted into a Nested Group of Topics if a selection header is implemented. The selection header would contain the standard alphabet (A-Z) to represent the first letter of a city name. Letters with at least one qualifying city would be hyperlinked to the list of qualifying Indiana cities beginning with that letter. Letters with no qualifying Indiana city would be grayed-out and not hyperlinked. By default, the first qualifying city in alphabetical order would have its letter selected. Thus, if Anderson, IN is first alphabetically, all cities starting with A are shown. If Brownsburg, IN is first alphabetically and there are no cities beginning with A, then all cities beginning with B are initially displayed alphabetically.*
Navigation Strategy	Index navigation pattern

Parameter Introductory Act

Name	Retail Stores by City
Introductory Content	The introductory act will re-affirm the selected city name.
Organization	A list of all retail stores within the selected city is displayed to the user, ordered alphabetically by retail store name. Retail store name will be access point to the individual instance of the Retail multiple topic. Additional information, such as address and/or phone number, should also be considered for display purposes (non-hyperlink).
Navigation Strategy	Index navigation pattern

Parametric Value Choice

Name	County
Introductory Content	n/a
Organization	Each line contains an Indiana county name with at least one retail store selling Indiana-based microbrews. List of counties displayed in alphabetical order.
Navigation Strategy	Index navigation pattern

Parameter Introductory Act

Name	Retail Stores by County
Introductory Content	The introductory act will re-affirm the hotel selection.
Organization	Each line will contain name(s) of retail stores located in the selected county. The list will be in alphabetical order by retail store name. May also contain the city the retail store is located in (non-hyperlink) for clarification purposes, as the selected county may have multiple cities with participating breweries..
Navigation Strategy	Index navigation pattern

IDM PAGE DESIGN REPRESENTATIONS

MULTIPLE TOPIC DIALOGUE ACT EXAMPLE – MULTIPLE TOPIC "MICROBREW"

Figure P-IDM #1 shows a generalized electronic sketch of the default content dialogue act of Multiple Topic "Microbrew" for Barley Island Brewery's "Dirty Helen Brown Ale" microbrew. The figure demonstrates the "Details" dialogue. The user reached this particular instantiation of "Microbrew" through the "Microbrews by City", selecting Noblesville, IN.

Figure P-IDM #1: Dirty Helen Brown Ale instantiation of Multiple Topic "Microbrew"

Figure P-IDM #1: Multiple Group Topic: "Microbrew" – Content Dialogue: "Details" **Instance: Dirty Helen Brown Ale (from Barley Island Brewery – Noblesville, IN)**	
Content	Content (all dialogues): Picture of individual microbrew label, microbrew name, brewery name, address, phone number, web site link. Content (dialogue-specific): Description of microbrew, availability descriptions, ABV, IBU, SRM values. All content to be supplied by brewery.
Structured Links	Five links between Picture/Microbrew Name/Address section & details information section, displayed in tabular format.
Semantic Relationships	Four links under details information section, one per proposed transition act. • Other Similar Microbrews: From Microbrew to Microbrew • Restaurants serving *(individual Microbrew name)*: From Microbrew to Restaurant • Where to Purchase *(individual Microbrew name)*: From Microbrew to Retail • Scheduled Tasting Events: From Microbrew to Event Additionally, brewery name in introduction section is direct link from Microbrew to individual instantiation of Multiple Topic "Brewery"
Landmarks	Links to primary introductory content, plus links to all three single group topics.
Orientation Info	Top of page, dependent on the introductory act direction used by the visitor.

PARAMETRIC INTRODUCTORY DIALOGUE ACT EXAMPLE

Figure P-IDMs #2 & #3 show a generalized electronic sketch of the multiple introductory act "Microbrews by Style". Figure P-IDM #2 shows the initial selection page of microbrew styles, and Figure P-IDM #3 shows the event listings for the selected microbrew style (in this example, we have selected All Ales, which will include the "Dirty Helen Brown Ale" from previous page diagram (See Figure P-IDM #1 for individual Microbrew instantiation).

Home > Microbrews > By Style

Select Your Style

All Ales
Ale beers are brewed with top-fermenting (actually ferments throughout the wort) yeast which allows for rapid fermentation at warmer temperatures. Ales include everything with ale in the name (pale ale, amber ale, etc.), porters, stouts, Belgian specialty beers, wheat beers and many German specialty beers. Generally have a more robust taste, are more complex and are best consumed cool (45F or a bit warmer) rather than cold.

All Lagers
Lager beers are brewed with bottom-fermenting yeast which ferments more slowly and at colder temperatures. Lagers include pilsners, bocks and dopplebocks, Marzens/Oktoberfests, Dortmunders and a few other styles found mostly in Germany. Best consumed at a cooler temperature than lagers, although anything served at less than 38F will lose most of its flavor.

United States Beer Styles
Amber Ale
American Pale Ale
American-Style Lager
Cream Ale
Steam Beer

Belgium Beer Styles
Flanders Red Ale
Oud Bruin
Saison
Lambic
Witbier

United Kingdom Beer Styles
Barley Wine
Bitter
Brown Ale
Indian Pale Ale
Mild Ale
Old Ale
Porter
Scotch Ale

German Beer Styles
Altbier
Berliner Weisse
Bock
Dortmunder Export
Dunkel
Gose
Pale Lager
Kellerbier
Kölsch

All Microbrews   All Events   All Restaurants   All Retail Stores

Introduction to Indiana Beer   Microbrew Phenomenon   Indiana Microbrew Suppliers

Figure P-IDM #2: "Style" Single Introductory Act for the Multiple Group Topic "Microbrew"

Figure P-IDM #2: Multiple Group Topic: "Microbrew" – Single Introductory Act: "Style"	
Introductory Content	Restate the purpose of page (selection of a microbrew style). Two selections, "All Ales" & "All Lagers" have a brief description to them, which act as an introduction to assist in style selection.
Selections	All microbrew styles within web site (as decided by the web site) are shown to the user. All Ales & All Lagers are at the top, along with corresponding descriptions. All further sub-styles are grouped by country origin and alphabetized. *This list is subjective as per the directive of the web site construction, and is subject to change.*
Landmarks	Links to primary introductory content, plus links to all three single group topics.
Orientation	Top of page, dependent on the introductory act direction used by the visitor.

Home > Microbrews > By Style > All Ales

All Ales

Alabaster Witbier	Oaken Barrel Brewing Co.	Greenwood
BarFly India Pale Ale	Barley Island Brewing Co.	Noblesville
Big Horn Blonde	Ram Restaurant & Brewery	Indianapolis
Big Red IPA	Ram Restaurant & Brewery	Indianapolis
Bitter Druid ESB	Sun King Brewery	Indianapolis
Blind Tiger Pale Ale	Barley Island Brewing Co.	Noblesville
Brickway Brown Ale	Rock Bottom Brewery	Indianapolis
Buttface Amber Ale	Ram Restaurant & Brewery	Indianapolis
Crab Apple Witbier	Sun King Brewery	Indianapolis
Dirty Helen Brown Ale	Barley Island Brewing Co.	Noblesville
Diving Duck American Brown	Broad Ripple Brew Pub	Indianapolis
Double Barrel Pale Ale	Rock Bottom Brewery	Indianapolis
Flat Top Wheat Ale	Barley Island Brewing Co.	Noblesville
Gnaw Bone Pale Ale	Oaken Barrel Brewing Co.	Greenwood
Grapefruit Jungle IPA	Sun King Brewery	Indianapolis
Heartland Red	Rock Bottom Brewery	Indianapolis
Indiana Amber Ale	Oaken Barrel Brewing Co.	Greenwood
Lawn Mower Pale Ale	Broad Ripple Brew Pub	Indianapolis
Original IPA	Broad Ripple Brew Pub	Indianapolis
Osiris Pale Ale	Sun King Brewery	Indianapolis
Pelican Pale Ale	Alcatraz Brewing Company	Indianapolis
Rathskeller Amber Ale	Sun King Brewery	Indianapolis
Razz Wheat	Oaken Barrel Brewing Co.	Greenwood
Red Bird Mild	Broad Ripple Brew Pub	Indianapolis
Saxophone Saison	Alcatraz Brewing Company	Indianapolis
Searchlight Ale	Alcatraz Brewing Company	Indianapolis
Sheet Metal Blonde	Barley Island Brewing Co.	Noblesville
Sinister Double	Alcatraz Brewing Company	Indianapolis
Sunlight Cream Ale	Sun King Brewery	Indianapolis
Superfly IPA	Oaken Barrel Brewing Co.	Greenwood
Wee Mac Scottish Ale	Sun King Brewery	Indianapolis
71 Pale Ale	Ram Restaurant & Brewery	Indianapolis

All Microbrews   All Events   All Restaurants   All Retail Stores

Introduction to Indiana Beer   Microbrew Phenomenon   Indiana Microbrew Suppliers

Figure P-IDM #3: "Style X" Parametric Introductory Act for the Multiple Group Topic "Microbrew"

Figure P-IDM #3: Multiple Group Topic: "Microbrew" – Parametric Introductory Act: "Style X"	
Introductory Content	Restate the beer style selected.
Selections	All microbrews designated by the selected beer style are displayed to the user, ordered alphabetically by microbrew name. Secondary ordering of microbrews listed (brewery name, city) to be determined later. Microbrew name will be a link to to the actual Microbrew instantiation.
Landmarks	Links to primary introductory content, plus links to all three single group topics.
Orientation	Top of page, dependent on the introductory act direction used by the visitor.

TRANSITION DIALOGUE ACT EXAMPLE

Figure P-IDM #4 shows a generalized electronic sketch of a transition act from an instantiation of the Multiple Group Topic "Microbrew" to an instantiation of the Multiple Group Topic "Restaurant". The user has just clicked on the "Restaurants serving Dirty Helen Brown Ale" link from the previously-selected microbrew (See Figure P-IDM #1 for Microbrew instantiation). The user previously arrived at the individual microbrew via the "Microbrew by City" parametric introductory act.

Note: The link provided in the individual instantiation of Microbrew should be _dynamically adjusted_ to reflect the selected microbrew's name, for clarity benefit of visitors.

Figure P-IDM #14: Transition Act "Is Served At" from Multiple Topic "Microbrew" to Multiple Topic "Restaurant"

Figure P-IDM #14: Transition Act "Is Served At"	
Constituents (From / To): Microbrew / Restaurant	
Introductory Content	Picture of individual microbrew label, microbrew name, brewery name, address, phone number, web site link. Restate transition page type purpose (Restaurants serving *(individual Microbrew name)*), and the microbrew instantiation *being traversed from*.
Selections	List all known restaurants serving the previously-selected microbrew in alphabetical order, including address and phone number. Restaurant name is link to the individual instantiation of the Multiple Group Topic "Restaurant" for that listing.
Landmarks	Links to primary introductory content, plus links to all three single group topics
Orientation	Located at top of page. Name of Microbrew is a return link back to the individual instantiation of the Multiple Group Topic "Microbrew". The orientation remains focused with the microbrew selection, as visitor has not reached the individual restaurant selection as of yet.

HOME PAGE & SUB-AREA EXAMPLES

Figure P-IDM #5: Perceived Home Page (left-hand navigation collapsed – Sub-Areas are displayed by default)

⏻Microbrews
- All Microbrews
- Award Winners
- Newest Microbrews
- - - - - - - - - - - - - - -
- By ABV
- By City
- By Seasonal Brews
- By Microbrew Type

⏻Breweries
- All Breweries
- - - - - - - - - - - - - - -
- By City
- By County

⏻Events
- All Events
- - - - - - - - - - - - - - -
- By City
- By County
- By Date

⏻Restaurants
- All Restaurants
- - - - - - - - - - - - - - -
- By City
- By County
- By Style

⏻Retail Stores
- All Retail Stores
- - - - - - - - - - - - - - -
- By City
- By County

Figure P-IDM #6: Perceived Home Page
(demonstrating expanded Sub-Area & Introductory dialogue selections for left-hand navigation)

Figure P-IDM #5 & #6: Perceived Home Page	
Homepage Content	Introductory paragraph describing purpose of web site. Main message area contains links to the three individual Single Topics, separate News and Announcements section, and a running calendar showing known events for the current month. All Sub-Area and Introductory Acts to Multiple Topics are found along left-hand navigation in a "collapsed" format, to which each are expandable to show the full content.
Links	All Single Topic (3), Sub-Area (5), and Introductory Acts (21) are represented as links within the homepage. • Welcome Message: Single Topic "Welcome" • Introduction to Indianapolis: Single Topic "Introduction to Indianapolis" • Microbrews Area: Contains three (3) single introductory act links and four (4) multiple introductory act links • Breweries Area: Contains one (1) single introductory act link and two (2) multiple introductory act links • Events Area: Contains one (1) introductory act link and three (3) multiple introductory act links • Restaurants Area: Contains one (1) single introductory act link and three (3) multiple introductory act links • Retail Stores Area: Contains one (1) single introductory act link and two (2) multiple introductory act links Individual sub-area headers are hyperlinks to the sub-area itself. Thus, by clicking on the word "Microbrews" itself, the visitor is directed to the Microbrews sub-area (See Figure P-IDM #4 for representative diagram).

For navigation simplicity, it is perceived each of the five primary areas referenced on the homepage would have a specific and separate sub-area home page. This will allow users to return to a baseline starting point without having to return completely to the primary homepage. Figure P-IDM #7 represents a sub-area homepage design, in this case, for the sub-area "Microbrew".
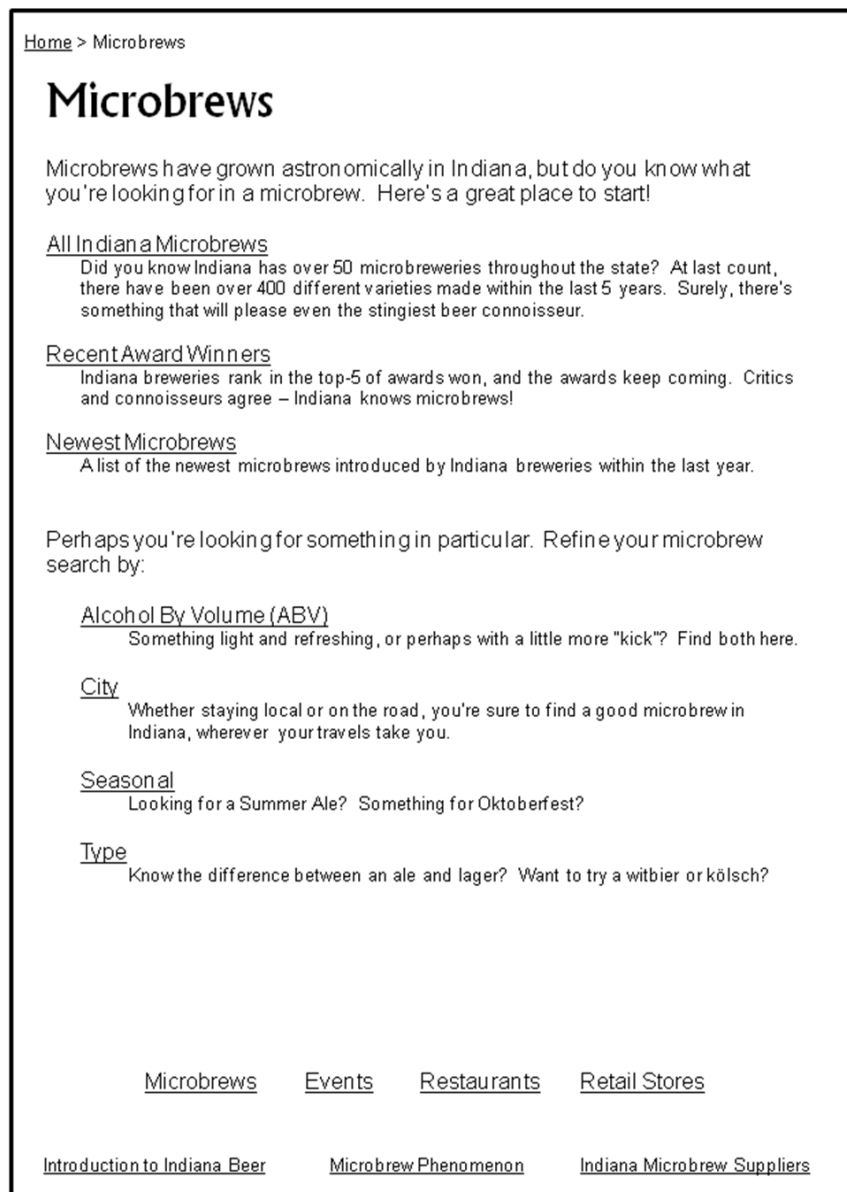
Home > Microbrews

Microbrews

Microbrews have grown astronomically in Indiana, but do you know what you're looking for in a microbrew. Here's a great place to start!

All Indiana Microbrews
Did you know Indiana has over 50 microbreweries throughout the state? At last count, there have been over 400 different varieties made within the last 5 years. Surely, there's something that will please even the stingiest beer connoisseur.

Recent Award Winners
Indiana breweries rank in the top-5 of awards won, and the awards keep coming. Critics and connoisseurs agree – Indiana knows microbrews!

Newest Microbrews
A list of the newest microbrews introduced by Indiana breweries within the last year.

Perhaps you're looking for something in particular. Refine your microbrew search by:

Alcohol By Volume (ABV)
Something light and refreshing, or perhaps with a little more "kick"? Find both here.

City
Whether staying local or on the road, you're sure to find a good microbrew in Indiana, wherever your travels take you.

Seasonal
Looking for a Summer Ale? Something for Oktoberfest?

Type
Know the difference between an ale and lager? Want to try a witbier or kölsch?

Microbrews   Events   Restaurants   Retail Stores

Introduction to Indiana Beer   Microbrew Phenomenon   Indiana Microbrew Suppliers

Figure P-IDM #7: Perceived Sub-Area Home Page (Example of "Microbrew")

Figure P-IDM #7: Perceived Sub-Area Home Page (Microbrew Sub-Area)	
Homepage Content	Introductory paragraph introducing the Microbrew sub-area home-page
Links	All Single Topic and Introductory Acts– SPECIFIC TO THE SUB-AREA – are displayed to the user. Each hyperlink has a quick description as to what the introductory act will present, allowing visitor to understand the upcoming content.
Landmarks	Links to _sub-areas home pages_, plus links to both single group topics.
Orientation Info	Top of page, which includes a link back to the primary home page