

Prepared for Cape Fear Riverwatch and fulfills a
requirement for MIT 513

Purpose

This instructional module is designed to present an overview of Greenfield Lake Park (GLP) by providing introductory information to potential visitors. It will be accessed from the CFRW website and be branded as a UNCW MIT project in collaboration with CFRW. The intended users are visitors to the CFRW website and will range in age from elementary school-age children to adults. Because of the wide age range of potential users, the module will present basic information regarding the park, activities available, and an introduction to the flora and fauna found in the surrounding habitat. The instructional module will provide access to useful information about the many aspects of Greenfield Lake Park, and it will promote and attract visitors to the lake. It is our hope to showcase this wonderful resource while educating the public about the park and the life that inhabits the environment there.

Instructional Problem

Greenfield Lake Park attracts many visitors each year, especially families, due to the variety of activities available. Parents visiting the park often have a common set of questions regarding park facilities and amenities (parking, picnic areas, and available activities). Inquisitive children, visiting with their families, are typically curious about the wildlife living in and around the lake. It is not uncommon for children to ask their parents a question like, “What sort of tree is that?” or “What kind of birds are those?” Visitors to GFP may not fully appreciate and or be able to discuss with their children the lake environment and its inhabitants. Parents may feel ill-equipped when children ask questions like “What is that green stuff in the lake?”

Providing necessary park information prior to the visit can improve the quality of the family visit and hopefully, result in a return to the park at a later date. The virtual park experience prior to the actual visit can be the starting point for a dialogue between children and their parents or possibly teachers, concerning the local wildlife and environmental issues surrounding the lake. By giving parents simple answers to common question about the lake and its environment, families will enjoy and use the lake more.

A Web-based Instructional Module is the Solution

Time is tight and a web-based instructional module allows for the user to gather information twenty-four hours a day, seven days a week via the Internet. Busy parents will use the Internet to search for Greenfield Lake Park in order to get logistical information such as directions, activities and parking. With this module, we hope to expand the use of the CFRW site (where the instructional module is hosted and accessed) to include learning activities about the lake’s inhabitants, and environmental issues affecting the park. The web-based instructional module format allows for:

1. Persistent access to the information, via the Internet.
2. Exploration of the material on their own time, at their own pace and potentially, multiple times, depending on the learner’s needs.
3. A fun learning experience for both adults and children.
4. Assessment activities that provide feedback to the user and reinforce the learning process.
5. Interaction with subject matter experts working within the park and can be easily accessed by a large population.

6. A multimedia experience to entice visitors of all ages.
7. Learners to be motivated to visit the park and experience the things viewed in the module.

Target Audience

This module is designed to provide general information for visitors to Greenfield Lake Park and will potentially be used by both adults and children. The age, educational levels and computer abilities of adult visitors will vary greatly and therefore, the module will need to be user friendly on an introductory level. This will also allow the module to be easily accessible to a wide range of children. The program will target both new and returning visitors to the park. The target audience will need to have basic computer skills, including knowledge of how to access a website. Additionally, the project team will investigate the possibility of a Spanish Language version of the module to accommodate the large Spanish speaking population of park visitors.

Instructional Setting

This program will be built using the Flash media authoring environment. The targeted audience will be accessing this program from internet connected computers using a web browser. To access the interactive components of the web-based instructional module, the user will need a computer with an Internet connection, a current web browser such as Mozilla Firefox 2.0 or Internet Explorer 7. They will also need the Adobe Flash Player, which is available as a free download at <http://www.adobe.com>. Speakers will allow the user to experience the audio portions of the module. The typical Internet user will already have these components. Because of the highly portable nature of Flash and the web-based delivery of this module, the instruction will be highly accessible. The module will be accessed through a link on the Cape Fear Riverwatch website (<http://www.cfrw.us/>), and can be made available on CD ROM.

Objectives and Test Items

This module will have six objectives. The first two will address some basic park history and provide an orientation to the park. The latter four objectives are focused on the environmental and safety aspects of the park.

#	Objective	Test Item
1	Given a list of statements, the learner will identify true statements regarding the history of Greenfield Lake.	<p>Directions: Identify the correct responses for the question below by using your mouse to place a check in the box(s) to the left of each statement that is true.</p> <p>Which of the following statement(s) concerning Greenfield Lake is/are true?</p> <p><input type="checkbox"/> Greenfield Lake started as a mill pond for Mr. Smith in 1906.</p> <p><input type="checkbox"/> The city of Wilmington made the lake and the park in the 1950's as a memorial for the veterans of WWII.</p> <p><input type="checkbox"/> A marathon dance contest was conducted at Greenfield Lake and is recorded in the Guinness Book of World Records.</p>

2	<p>Given a list of activities, the learner will identify activities that can be included in a day's visit to the park.</p>	<p>Directions: Identify the correct responses for the question below by using your mouse to place a check in the box(s) to the left of all true statements.</p> <p>Your family may participate in which activities while visiting Greenfield Lake Park?</p> <p><input type="checkbox"/> Biking <input type="checkbox"/> Walking <input type="checkbox"/> Running <input type="checkbox"/> Picnics <input type="checkbox"/> Swings <input type="checkbox"/> Swimming <input type="checkbox"/> Boating <input type="checkbox"/> Fishing <input type="checkbox"/> Bird watching</p>
3	<p>Given two video clips, the learner will identify the video that shows the safest boating behavior.</p>	<p>Directions: Click and watch each of the short videos below. Using your mouse, place a check in the box that represents safe boating behavior.</p> <p><input type="checkbox"/> Video #1 <input type="checkbox"/> Video #2</p>
4	<p>Given pictures of typical trees found about Greenfield Lake, the learner will identify the species' common names by matching the image of the tree with its common name.</p>	<p>Directions: Match the common tree name with its picture by dragging and dropping the common name into the correct box.</p> <p>Southern Magnolia</p> <p>Bald Cypress</p> <p>Longleaf Pine</p> <p>Magnolia</p>
5	<p>Given pictures of birds common to Greenfield Lake, the learner will identify the species' common names.</p>	<p>Directions: Match the common bird name with its picture by dragging and dropping the common name into the correct box.</p> <p>Herring Gulls</p> <p>Mallard Ducks</p> <p>Canada Geese</p>
6	<p>Given a list of possible factors, the learner will identify factors that contribute to the growth of algae in Greenfield Lake.</p>	<p>Directions: Identify the correct responses for the question below by using your mouse to place a check in the box(s) containing the correct answers.</p> <p>Place a check next to the items below that contribute to the growth of algae in Greenfield Lake.</p> <ul style="list-style-type: none"> • Animal waste <input type="checkbox"/> Fertilizer • Fish <input type="checkbox"/> Diesel fuel

Description of Treatment

This instructional module uses the metaphor of a walk around the lake with a child. There will be a map with station points with relevant information about that station. The program will make use of pictures of the park, videos and animation to engage and inform both adults and children.

Visual design specifications

The visual design will be smooth and professional. In the interest of the audience (Parents and children), the tone will be simple and easy to follow. A five hue color scheme will be used, such as this one found on the ‘Colour Lovers’ website : http://www.colourlovers.com/palette/201057/walk_in_the_park . Fonts will be san serif with a blocky serif font for headlines. The line height is increased to make screen reading easier.

Animations will be used for assessments, practice, review and content slides. The animation should be interpretive and interactive, and not merely decorative. There will be at least 3, non-assessment animations.

Short clips of audio and/or video may be used to further engage the audience. They should not distract or take longer than 30 seconds to download over a basic broadband connection.

Screen size	1024 x 768
Font – content text	Candara – curvy san serif
Font – headlines	Arno Pro Smbd or Americana -blocky serif
Color scheme	http://www.colourlovers.com “walk_in_the_park”
Line Height	1.5 to 1.25 ems
Animations	3 for non-assessment
Audio / Video	Content related and quick to download

Photos for the project:

<http://picasaweb.google.com/nslanier/GreenFieldLakeTourProject?authkey=zdPflj7SYLg>
<http://picasaweb.google.com/nerdscience.com/GreenfieldLakePark>

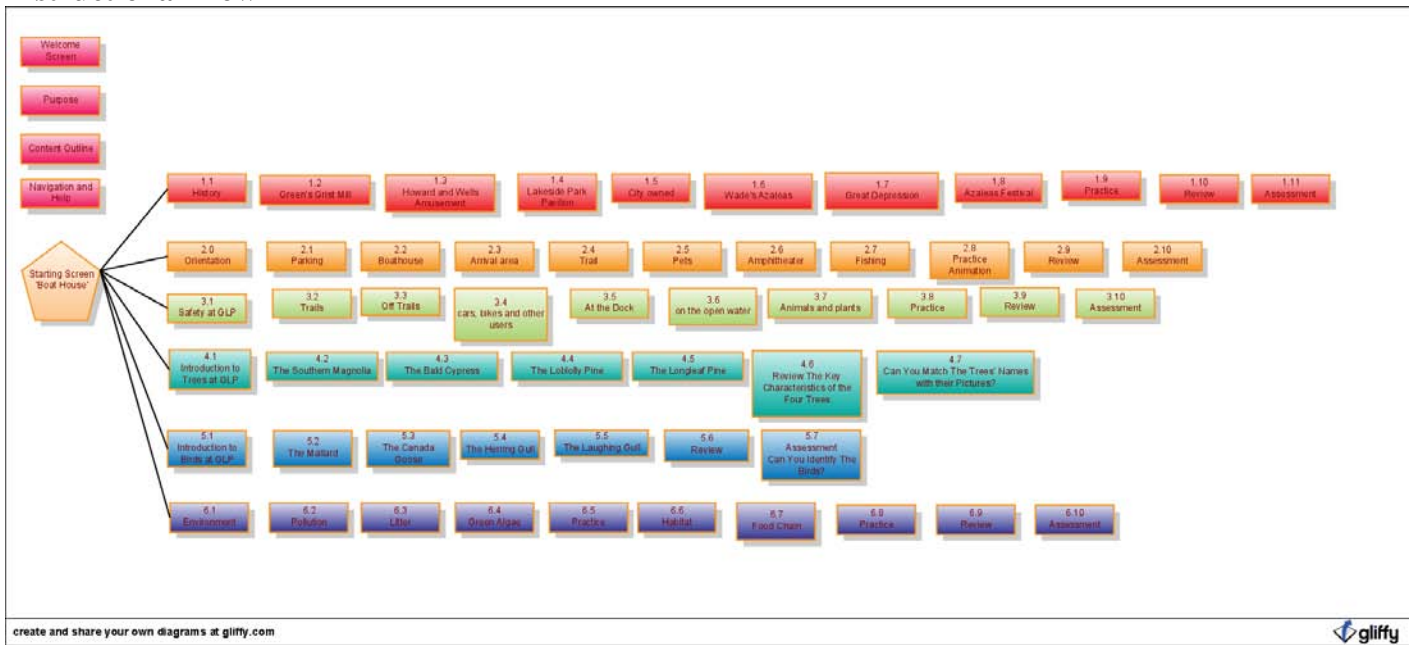
Content Outline

	Section	Description
	Introduction	<ul style="list-style-type: none">• Welcome• Purpose• Content Outline• Navigation and Help• Starting Screen ‘Boathouse’
I	History	<ul style="list-style-type: none">• History Introduction• Green’s Grist Mill

		<ul style="list-style-type: none"> • Howard and Wells Amusements • Lakeside Park Pavilion • City owned • Wade's Azaleas • Great Depression • Azalea Festival • Practice • Review • Assessment
II	Orientation	<ul style="list-style-type: none"> • Orientation Introduction • Parking • Boathouse • Arrival Area • Trail • Pets • Amphitheater • Fishing • Practice • Review • Assessment
III	Safety	<ul style="list-style-type: none"> • Safety Introduction • Trails • Off trails • Cars, bikes and other users • At the dock • On the open water • Animals and plants • Practice • Review • Assessment
IV	Identify Trees	<ul style="list-style-type: none"> • Introduction to Trees • The Southern Magnolia • The Bald Cypress • The Loblolly Pine • The Longleaf Pine • Review • Assessment
V	Identify birds	<ul style="list-style-type: none"> • Introduction to Birds • The Mallard • The Canada Goose • The Herring Gull • The Laughing Gull • Review • Assessment

VII	Environmental Concern	<ul style="list-style-type: none"> • Environmental Introduction • Pollution • Litter • Green Algae • Practice • Habitat • Food chain • Practice • Review • Assessment
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Instructional Flow



To view this image on the web, please visit: <http://www.gliffy.com/publish/1393240/>

Welcome screens

The learner will be welcomed to the Greenfield Lake site through the title slide. The next few slides will state the purpose of the module, a basic content outline and provide module navigational instruction.

Storyboards and Screen Mockups

See attached 'GillispieLanierStauss_storyboard.doc' .

For a sample storyboard drawing see attached 'sample_storyboard_Gillispie.jpg'

For a sample screen mockup see attached 'mockup_513'

Objectives and Instructional Content

Each of the six instructional units will be presented with an introduction slide informing the learner of the objectives and basic content to be covered. The screens will display pictures which correspond to the presented textual information in order to maintain the user's attention and to improve learning. Each slide

will be developed using the CRAP principle (Contrast, Repetition, Alignment and Proximity) and will be consistent in layout, screen design and navigation. The user will have control over which of the 6 objectives to view and in which order. However, once the user begins the objective section, they will only have limited sequence control (They will have next, previous, and home / 'Boathouse' buttons)

Practice Activities

Each unit will contain practice activities to allow the learner to apply the information presented in the current unit. The activities will mimic the assessment items found at the end of the module, however will not be in the format of a test question. Rather they will include fun drop/drag or matching activities.

Review and Assessment

Each unit will end in a one slide review of the presented information.

The assessment items will be presented upon the conclusion of the last unit in order to measure the learning that occurred with the user.

Task List

<http://student.uncw.edu/nsl5074/513courseproject-chart.html>

Project Team

Lucas Gillispe- Instructional Designer, Creative Director, Author (Materials Developer)
 Newman Lanier- Instructional Designer, Interactive Media specialist, Author (Materials Developer)
 Fran Strauss - Instructional Designer, Editor, Project Manager, Author (Materials Developer)
 Joe Abatte - SME, Implementation representative
 Doug Springer - Sponsor

Budget

Project Personnel	Hours	\$ / hour	Costs
Project Manager	70	\$23.00	\$1,610.00
Instructional Designer	70	\$25.00	\$1,750.00
Multimedia Developer	20	\$20.00	\$400.00
Author (Materials Developer)	20	\$30.00	\$600.00
Interactive Animations Developer	20	\$40.00	\$800.00
SME	15	\$40.00	\$600.00
Photographer	5	\$20.00	\$100.00
Total	220		\$5,860.00
Delivery / site hosting			Included in the current hosting for http://www.cfrw.us
Awareness Materials (signage, flyers)			\$100
Small group incentives – Nature Tour gift certificate	15 units	\$15	\$225

Total			\$6185.00
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All budgeted items will be absorbed into the routine CFRW budget or donated.