

Bioactive: a game for library instruction at University of Florida

UF Game Group
Valrie Davis & Laurie Taylor

Additional Team Members: Sara Gonzalez,
Chelsea Dinsmore, Cindy Frey,
& Carrie Newsom

Outline

- Overview of UF's instructional program for undergraduates
- Why a game?
- Who we are
- Steps of development
- Where are we now?
- Future plans

In the Beginning....

How many undergrads? ENC Courses?

Currently - Many students get one-time BI courses

- How effective are they?
- Is there another more-engaging way to reach them?
- What about the students who miss those lectures?

Val is getting some information from Jana -- will fill this in today
6/11

We need a new approach

A web-based game students can play on their own time or as a class assignment

- Short
- *(Hopefully)* entertaining
- Teaches basic library skills
- Funding

-> Creation of game development group in the Marston Science Library

Our Game Team

Cynthia
Frey

Sara
Russell
Gonzalez



Chelsea
Dinsmore

Carrie
Newsom



Laurie
Taylor

Valrie
Davis



Steps of Development

- Reviewed other educational games
- Brainstorming
- Developed Learning Objectives
- Examined gaming platforms/development software
- Developed game plot
- Programming
- Developed images & website
- Playtesting
- Where are we now?

Reviewed other Games

Character Record, Celanawe Black Axe



Human, Chaotic Neutral
Rogue (12)

Strength	12	1
Dexterity	19	4
Constitution	14	2
Intelligence	14	2
Wisdom	8	-1
Charisma	12	1

AC 14
HP 80/80

Experience: 74049
Next Level: 78000

Main Weapon: Unarmed
Attack bonus: +13/+8
Damage: 1-3 + 1 (Critical: 20 / x2)
Offhand Weapon: Not Applicable
Fortitude: 6
Reflex: 12
Will: 3

Second Life

File Edit View World Tools Help

Cybrary City 7.4, 23, 24 (Mature) - Talis Cybrary City - Info

Focus Move Edit Create Land
Click and drag to change view

- Position
- Rotate (Ctrl)
- Stretch (Ctrl Shift)
- Select texture
- Edit linked parts

Use Grid [Options...](#)
 Stretch Both Sides
 Stretch Textures

Ruler mode: World

[Less](#)

General Object Features Texture Content

Name: **ModLife Series: ModHouse I**

Description: **(No Description)**

Creator: Rem Koolhaas [Profile...](#)

Owner: Lorelei Junot [Profile...](#)

Group: sll2 [Set...](#)

1 Object, 23 Primitives

Permissions:

You cannot modify this object.

allow visitors to move
 allow visitors to move
 allow anyone to copy
 edit objects

Primitives: 10

original copy convert

Texture permissions:

modify copy retexture only

View permissions:

Touch/grab (default)



Brainstorming

Types of Game

Themes

Learning Objectives

Possible software options

Game plot

What Do Students Need to Know

- What resources are in the library
- What is the catalog and how to use it
- How to use the online Course Reserve system
- How to locate articles in a database
- Location of libraries

Learning Objective Example

Understanding: The catalog contains materials that are available electronically or at various campus libraries.

Knowledge:

- Difference between databases & the catalog.
- Call numbers organize materials by subject & determine physical placement.
- Materials are available electronically.

Skills:

- Demonstrates how the catalog can lead you to a book or electronic resource.
- Demonstrates how to recognize different call number formats and their significance.

Exploring Possible Software

Concerns:

- **Accessibility:** standards-compliant for multiple platforms and methods of access
- **Usability:** easy to use for all technology and game skill levels; no large downloads or high-end technical requirements; focus on learning objectives and not on learning the game
- **Sustainability:** software that our team could use and maintain

Software Options

- 2D & 3D Game Design Software: overly focused on visual layout; required re-creating tools in-world, with limited resources risked confusion from game to real learning needs
- Inform: Zork and other text-based games; mobile browser compliant; natural language style programming
- Web Quests: Path-driven web navigation, with clues hidden in the text (online *Choose Your Own Adventure*)

Game Plot

Needed:

- Plot: short and motivational
- Characters: caricatures for ease
- Purpose/tools: reasons to do research within the story

Disaster Prevention:

- Hurricane: plot issues with what to research and how
- Biological disaster: "magic" antidote style end-goal easier to develop in line with the game plot and familiar scenario

Development

Programming: Challenges

- Tracking changes and development process
- Recompiling required (as opposed to webquests)
- Revision history, like in Google Presentations, not embedded in Inform 7 (as it would be in commercial style development applications)
- *Images & Website*
Necessary components of development

Playtesting: Comments from Playtesters

1. How do you put back the desk?
2. Correct the spelling of "recognize".
3. Need better game instructions - players don't know how to move about in game or look at things
4. Text for lab desk drawers
5. Not clear how to put ingredients in beaker
6. Fix team names (Kentucky vs. Duke)
7. Add library descriptions, computers, globe, etc.
8. synonym for pour, mix, o'connell. dome, o'dome, Sara, clue, 'make antidote'
9. response for 'wait in line'
10. Change 'help #' -> # confused player who typed help #2
11. If incorrect ingredients are added to beaker, error msg.
12. 'kick professor' response
13. consistent for "arena" and "center" for O'Connell
14. Fix response for librarian at desk
15. Help for using Ares (make it clear that they're not logging on as the prof)
16. Listing for shelf 5 - out of order with other shelves in list
17. Put "Subject Guide" lowercase in antidote recipe
18. Walk-through has water instead of alcohol
19. Potential problem running on a mac (Cindy's guildmate)

Where are we now?



Its 8 am and you've just wearily stumbled into Dr. Sara Gonzalez's lab to get some work done. She's a world-renowned expert on pathogens and there are nasty viruses contained within the lab which require extra care in handling.

As soon as you unlock the door and step into the lab you realize that something is very wrong. The lab is a disaster and you find Dr. Gonzalez lying on the floor amid debris.

She is semi-coherent and you manage to catch a few words,

"antidote", "game", "course reserves",

she mutters. She has a crumpled note in her hand that she is trying to give you.

Frantically, you scan the bottles trying to see if any viruses are missing and realize that one of the most toxic, the Gator Virus, is absent.

- Integration into classes (*pending*)
- Deployment of game in new framework (*pending*)

Current Development



BIOACTIVE

Brought to you by the UF Smathers Libraries

Help
Library Catalog
Course Reserves
Article Database
Library Map
About Us



Where do you want to go?

Marston Science Library Lobby
O'Connell Center