



UMass Lowell

COMP 4620 — GUI Programming II

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Goal Review

Our goal was to have a fully functional website with a fully functional Sudoku game. A fully functional website should have all links working, and all text formatted so that it is readable. A fully functional Sudoku game should have multiple difficulties, validation for inputs, and a way to check your answer.

Evaluation of Current Implementations

First off, we are happy with our overall thought process for our project. We initially thought to have users travel through various parts of our website like “Login/Setup” and “Tutorial Page”. We then switched our mind set and asked ourselves what does a single web application look like and is it a better fit than what we have now, simply put yes. When clicking on our tutorial page, a menu drops down with all of the instructions right there without having to leave the page. Other Sudoku websites will load a new page and losing any progress made on a Sudoku puzzle. Our difficulty setting is within a drop down menu to reduce clutter on our webpage to produce a cleaner look. Our options menu tab is only able to control sound as of right now. In the future we are looking to add more sound features and being able to switch between more backgrounds on the fly. Login menu tab is only a placeholder as we are focusing on UI enhancements. When designing the actual Sudoku game, we initially started to write the code but then we had flashbacks sitting in class with our wise professor telling us to find code and document it! The code we found was created by, Moriel Schottlender, and it is really top notch. It can take any partial input of a puzzle and solve it around 10ms. There is a light grey border around the game and will change color if any errors occur while playing or clicking the evaluate button.



New Issues

Our UI has been in constant change recently. We are thinking about changing the color of the menu bar to match the current theme that is displayed. While doing some internal testing we notice that the drop down menu section has potential to be a frustrating experience. A user might accidentally hover over a menu and now are unable to see a portion of the game board. To fix this, we will be implementing clickable dropdown menu's.

Not Yet Implemented Features

Changeable Themes: Changeable themes will be reasonable for us to complete within the given timeframe. It would involve writing multiple versions of CSS for the page then writing a function that would change the class of all objects when a button is pressed.

Achievements Page: In order for us to get the achievements page working we would need to get the backend database working. We are currently focusing on UI features and do not have any backend yet. As of now it does not look like we are going to be able to implement an achievements page in time.

Simple Audio: It would be reasonable for us to add some kind of audio such as a sound that plays when you've completed the puzzle.

Print: To print a Sudoku puzzle. Our print feature will be one of the last items to be implemented. We will be focus on heavily on the UI in the coming months.



Assess Delivery Schedule

Already completed features: Tutorial, Easy to Expert Difficulties, Board Validation, Background Music, Background image swapping, Solve Button, Reset Button.

Achievements Page: The Achievements page has been scrapped for now as we want to focus more on the UI with our remaining time.

Multiple themes: The ability to choose from multiple themes will most likely be completed on schedule. (Mar. 20)

We are pleased with the overall basic functionality of our website. Throughout the beta process our plan will to be improve UI controllability, color scheme, and visuals of the game board.



Project Schedule

Due Date	Type	Task	Martin	Dylan	Michael
Mar 13, 2016	Audio	Creating additional audio		●	
Mar 20, 2016	UI/CSS	Different Zen themes – metal, ocean, rainforest	●		●
Mar 26, 2016	Audio/JavaScript	Completing a row 1-9 and/or completed game, create pleasant audio.	●	●	●
Apr 2, 2016	UI	Polish website	●	●	●
Apr 9, 2016	Beta	Beta version committed and public	●	●	●
Apr 9, 2016	Extra	Add any hopeful features.	●	●	●
Apr 16, 2016	Testing	Final testing, bug catching,	●	●	●
Apr 21, 2016	Final	Final version committed and public	●	●	●

