

Bro Team Sudoku Web Application SWE Project Plan

NUMBER	TASK TITLE & TASK DETAILS	TASK OWNER	SEPTEMBER					OCTOBER				NOVEMBER				DECEMBER		
			9/4/24	9/9/24	9/16/24	9/23/24	9/30/24	10/7/24	10/14/24	10/21/24	10/28/24	11/4/24	11/11/24	11/18/24	11/25/24	12/2/24	12/9/24	12/16/24
1	Gathering User Requirements																	
1.1	Research Domain Knowledge	All																
1.2	Meet with the customer and stakeholders	All																
1.3	Ask what they are looking for?	All																
1.4	Develop a Storyboard	All																
1.5	Develop Use Case Scenarios	All																
2	Generating Technical Requirements																	
2.1	System Architecture	All																
	2.1.1 Sequence Diagram	All																
	2.1.2 Components Diagram	All																
	2.1.3 Activity Diagram	All																
	2.1.4 Class Diagram	All																
2.2	Component Specification	All																
2.3	Interface Specification	All																
2.4	Communication Specification	All																
2.5	Algorithm Design	All																
2	Documentation Testing Specification																	
2.1	Collect and format all system architecture diagrams	2.1.1 Create a Google Drive to store all the Storyboards, Project Plan, Diagrams	Mark															
		2.1.2 Create a GitHub Repository to store the code in one place	Jan															
2.2	Comment the programming code when in the implementation phase	2.2.1 Provide comments for programming each algorithm, function, etc	All															
3	Implementation																	
3.1	Prototype Code	3.1.1 Test out Flask and Django FullStack Framework	Jan															
		3.1.2 Decide if this is the framework chosen for the project	All															
		3.1.3 Start prototyping various components	Mark															
		3.1.3.1 Set cell entry function	Jonathan															
		3.1.3.2 Undo Last Move(s)	Mark															
		3.1.3.3 Set Note	Mark															
		3.1.3.4 Check Puzzle	Jan															
		3.1.3.5 Select New Puzzle	Jan															
		3.1.3.6 Get Specific Hint	Jonathan															
		3.1.3.7 Get Random Hint	Jonathan															
3.2	Develop a GUI	3.2.1 Test the GUI	Jan															
		3.2.2 Decide what UI changes need to be made to the GUI	All															
		3.2.3 Refactor the GUI	Jan															
3.4	Application Code	3.4.1 Backend Development Week 1	Jonathan															
		3.4.1.1 Store pre-made games	Jonathan															
		3.4.1.2 Create datatypes for individual game components	Mark															
		3.4.2.1 Develop a simple interface with the game board	Jan															
		3.4.2.2 Make sure that the interface setup is independent of the code	Jan															
		3.4.3.1 Develop relationships to save games, number of wins, etc	Mark															
		3.4.3.2 Develop a login system to keep track of user information	Jan															
		3.4.4.1 Add additional functionality around the board prompting the user to click on the note cell, get a hint, etc	Jonathan															
		3.4.4.2 Develop individual pages where notes, archived games, etc will be stored and viewed by the user	Jonathan															
		3.4.5.1 Connect the Frontend to the Backend	Jan															
		3.4.5.2 Test that the relationships work between what information needs to be extracted from the different data types	Jonathan															
		3.4.6.1 Test seamless functionality of the interface with the backend game engine	Mark															
		3.4.6.2 Change GUIs is needed	Mark															
3.5	Test Code	3.5.1 Test the functionality of the different functions	Jan															
		3.5.2 Test the correctness of the algorithm	3.5.1.1 Fix bugs on the Frontend Side															
			3.5.2.1 Fix bugs on the Frontend Side															
			3.5.2.2 Fix bugs on the Backend Side	Mark & Jonathan														
4	Testing																	
4.1	Unit Testing	4.1.1 Check puzzle, Select New Puzzle	Jan															
		4.1.2 Set cell entry, Set note	Mark															
		4.1.3 Undo Last Move, Get Specific Hint, Get Random Hint	Jonathan															
4.2	Component Testing	4.2.1 Check puzzle, Select New Puzzle Backend & Frontend	Jan															
		4.2.2 Set cell entry, Set note Backend & Frontend	Mark															
		4.2.3 Undo Last Move, Get Specific Hint, Get Random Hint Backend & Frontend	Jonathan															
4.3	System Testing	4.3.1 Frontend	Jan															
		4.3.2 Backend	Mark															
		4.3.3 Frontend & Backend	Jonathan															
4.4	User Testing	4.4.1 Test GUI and seamless functionality	Jan															
		4.4.2 Test Single User Login and Saving Functionalities	Mark															
		4.4.3 Test Multiple User Logins and Storing of multiple individual data	Jonathan															