# **CHITKARA UNIVERSITY**

## **FORMATIVE ASSESSMENT-4**

## PROJECT DETAILS TEMPLATE

Group Number	4	
Project Title	Gamerz Hub	
Team Leader	NANDINI SHARMA (2010991951)	
Details of Work division	Student/roll-no NANDINI SHARMA/1951 MARYADA/1934 JIYA ARORA/1902 HIMANSHU/1886	Work / Role Allotted SCRIPTING  CSS AND BOOTSTRAP SCRIPTING HTML
High level Approach to be followed:  • Share the details in points	<ul> <li>In this project, the hub includes five games with a wide range of frontend work and no backend support.</li> <li>The five games created are <ul> <li>Tic-tac-toe</li> <li>Burnout Revenge</li> <li>Roll the Dice</li> <li>Hungary Snake</li> <li>Color the Squirtle</li> </ul> </li> <li>Each game uses core JavaScript concepts including JS libraries like jQuery and Ajax</li> <li>Different cdn links are used for different libraries as the cdn links are faster than the core library files to be downloaded. Using the cdn links browser downloads the file only once and hence, we can ensure the faster working of the site with the same (hence an internet connection is required to analyze the project)</li> <li>Since the games are made keeping in mind the Desktop gaming experience, it is requested to analyze the games in full screen modes.</li> </ul>	

	Though media queries are added for amazing UI experience
Lower level Approach to be followed:  • Share the details in points	<ul> <li>MainPage of Gamerz Hub         <ul> <li>the main page of the hub is designed keeping in mind the original websites over the Internet. The background is set using video tag to give it a unique feel. Whole page is divided into 2 columns with one containing the game divs and the other containing the ajax which can call the API on button click. Also, a login form is attached which can be displayed using the login button on the top navbar. For now the navigation bar includes demo anchor tags which can be put to use in future</li> </ul> </li> <li>Description of Games - Color the Squirtle         <ul> <li>the introduction page just contains a start button which on clicking will lead us to the main game's page.</li> <li>The main game includes color palette(with audio added for every color) for every body part of the Squirtle. Choose the color of your</li> </ul> </li> </ul>
	choice and finalize your Squirtle with clicking the 'Done' button.  The body of the Squirtle is made entirely using CSS
	• Burnout Revenge  o This game is like a normal racing game
	with only Desktop experience.  The first page is just the introductory page with a button which on clicking will take us to the main game's page
	<ul> <li>The UI of the game is given the look of a winter night with snowfall effect using pure CSS</li> </ul>
	<ul> <li>Even the cars and its tires in the game are made entirely of CSS.</li> <li>Game is designed using jQuery and cdn</li> <li>links are used for factor working</li> </ul>
	links are used for faster working.  O After a certain value for the score, the speed of the car increases for raising the bar of game a notch higher

### • Tic Tac Toe

- o It is the old school "Zero-Cross" game with a little change in the UI
- The game is applicable for both single and double players
- In both single and double players section, names have been asked keeping in mind the future backend support which can be provided to it

#### • Roll the Dice

- A simple betting game where random dice images appear on the screen and the player with the higher number dice wins
- Timing functions have been used along with Math.random function for declaring the winner

#### • Hungary Snake

- The game includes a main introduction page which only contains a start button
- o The game works like the old school snakes game i.e., if the snake eats the food, we get one point and if it collides with itself, game over. Your score will be shown using an alert box with the block position as well
- Even audio tags are added for adding more fun to the game
- This game can also be played in mobile since mobile controllers are given for the movement of the snake
- In the Desktop version, use the arrow keys for moving the snake

Advantage of the project with applicability:

Highlight the unique feature(s) of the project if any

- The project will give users a live experience of playing old school games on another level with a few changes made so that the games will not be boring and can be played in free time with quick access
- It has been tried to give project the feel of a real website by adding ajax to it, which gives a look of advertisements on real websites.
- Highlights of respective games
  - Burnout Revenge creating snowfall effect and making of cars is done entirely using CSS
  - Tic-Tac-Toe both single player and double player experience is given in the game
  - Roll the Dice Timing functions have been used for displaying random dice images
  - Hungary Snake Game controllers are given for the mobile version
  - Color the Squirtle the body of Squirtle is created entirely using CSS. Also, each color tab in color palette is given audio tag

Schedule for implementing the use case:

Share the Tentative Date of Completion of Expected Deliverables

Deliverable	Expected Date of Completion
User case 1	date
User case 2	date

Future scope of the project

• Share the details in points

- The scope of the project can be further enhanced by making the games look 3D with more perspective added to it which could match the level of more complex games
- Backend work can be added to the same such as for every player, a track of following parameters can be made –
  - Highest score for every player
  - Number of games played by the player
  - Speed of the car (In Burnout Revenge)
  - Remembering the history for the color combinations of the Squirtle (In Color the Squirtle)
  - Database for a new entry of a player
  - Games can further be made dynamic by adding multiplayer modes in it which not only will allow the player to play with his/her friends on the same system but can also connect with other players across the world using Internet Connection

### **DOCUMENT HISTORY:**

Created By	
Approved By	Associated faculty name (to be approved before the external viva)
Month of Creation	