



Student Kit

Objective

The project aims to develop an interactive platform dedicated to rejuvenating the cognitive abilities of elderly individuals. It addresses the decline in reasoning skills, cognitive capabilities, and reactive skills associated with aging. By offering friendly and interactive mind games like Sudoku, Wordle, Flip Card, Tic-tac-toe & many more.

This project strives to provide an enjoyable and accessible solution for a prevalent concern among the senior population.

Requirements Specification (RS)

This Requirements Specification table outlines the key features and functionalities required for your project, including their essential or desirable status, description, and any additional remarks.

It ensures that the project meets its objectives and provides an accessible and enjoyable solution for the users.

No.	Requirement	Essential / Desirable	Description of the Requirement	Remarks
RS1	The platform should offer a user registration system	Essential	Users should have the ability to create accounts to access the platform's features to the fullest.	
RS2	The Platform should have a user login mechanism	Essential	Users should be seamlessly able to login/logout of the platform	
RS3	The system should offer accessible user interfaces tailored to elderly users	Essential	The platform's interfaces should be designed for ease of use by elderly individuals	Interfaces should be simple but not inane.



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RS4	The platform should support multiplayer functionality	Desirable	Users should have the option to interact and compete with other users.	Improves upon the Engagement aspect
RS5	The system should have very easy navigation from one screen to other	Essential	This feature will provide freedom to user to switch from one option to other quickly	Provide quick links
RS6	The platform should provide progress tracking for the user	Desirable	Features such as scores, progress reports, etc. should be added for user engagement & improvement	
RS7	User data and progress should be securely & efficiently stored	Essential	Data privacy and security should be a priority in the system's design.	
RS8	The platform must be compatible with various devices and browsers	Essential	Users should be able to access the platform on different devices and web browsers.	
RS9	Accessibility features, such as text resizing and screen reader compatibility, should be provided	Essential	The system must accommodate various accessibility needs of elderly users.	
RS10	The platform must list an ample number of games, apps to choose from.	Desirable	Users should have access to a number of interactive games to rejuvenate their cognitive abilities.	
RS11	Regular system updates and maintenance must be conducted	Essential	Ongoing support and updates to ensure the platform's continued functionality.	
RS12	Users should be able to provide feedback to the developers	Desirable	Users should ability to express their opinions about their experience on the platform	



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RS13	The platform should list some premium games purchasable at prescribed rates	Desirable	Users should be able to invest in some premium games & subscriptions using real money	
RS14	The platform must have secure payment handling	Essential	The platform must securely handle all payment information for the paid features & games	

Database Fields Specification

User Table

No.	Field Name	Range of valid values for the field	Remarks
1	User Id	Up to 30 characters in length	Primary field
2	User Name	Up to 15 characters in length.	Special characters like underscore are not allowed.
3	Email Id	Up to 30 characters in length with valid email id rules	Must be a valid email address
4	Password	Up to 15 characters in length.	Special characters like underscore are allowed.
5	Gender	Male, Female, Don't wish to disclose.	Drop down menu
6	Location	Up to 15 characters in length.	Special characters like underscore are not allowed.



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Game Table

No.	Field Name	Range of valid values for the field	Remarks
1	Game Id	1 to 10000	Primary field
2	Game Name	Up to 50 characters in length	Special characters not allowed
3	Game Type	Numeric	1: Puzzle 2: Word Game 3: Board Game
4	Game Description	Up to 500 characters in length	Detailed description of the game
5	Game Price*	1 to 10,000	*Price of the game if it's applicable
6	User Rating	1 to 5	User rating of the game, 1(Low) to 5(High)

Progress Tracking Table

No.	Field Name	Range of valid values for the field	Remarks
1	User ID	1 to 10000	Primary field
2	Game ID	1 to 10000	Foreign Field
3	Level Number	1 to 1000	The apex level number the user has reached in the game
4	Score	0 to 1,000,000	User's score in the game
5	Last Played	Date	Date when the user last played the game
6	Progress Status	Numeric	1: In Progress 2: Completed 3: Yet to Play



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Payment & Subscription Table

No.	Field Name	Range of valid values for the field	Remarks
1	Payment ID	1 to 10000	Primary field
2	User ID	1 to 10000	Foreign field
3	Payment Date	Date	Date of payment transaction
4	Payment Amount	1-10000	The amount paid by the user
5	Payment Method	Numeric	1 : Credit/Debit Card 2 : UPI 3 : Net-Banking
6	Game ID	1 to 10000	Game ID of the game bought
7	Transaction ID	Alphanumeric depending upon the payment gateway used	Payment transaction Id for monetary purposes

Feedback Table

No.	Field Name	Range of valid values for the field	Remarks
1	Feedback ID	1 to 10000	Primary field
2	User ID	1 to 10000	Foreign field
3	Submission Date	Date	Date of feedback submission by the user
4	Feedback text	Up to 500 characters in length	Feedback text provided by the user
5	Status	Numeric	1: Submitted 2: Pending 3: Acknowledged
6	Developer Response	Up to 500 characters in length	Response from the development team



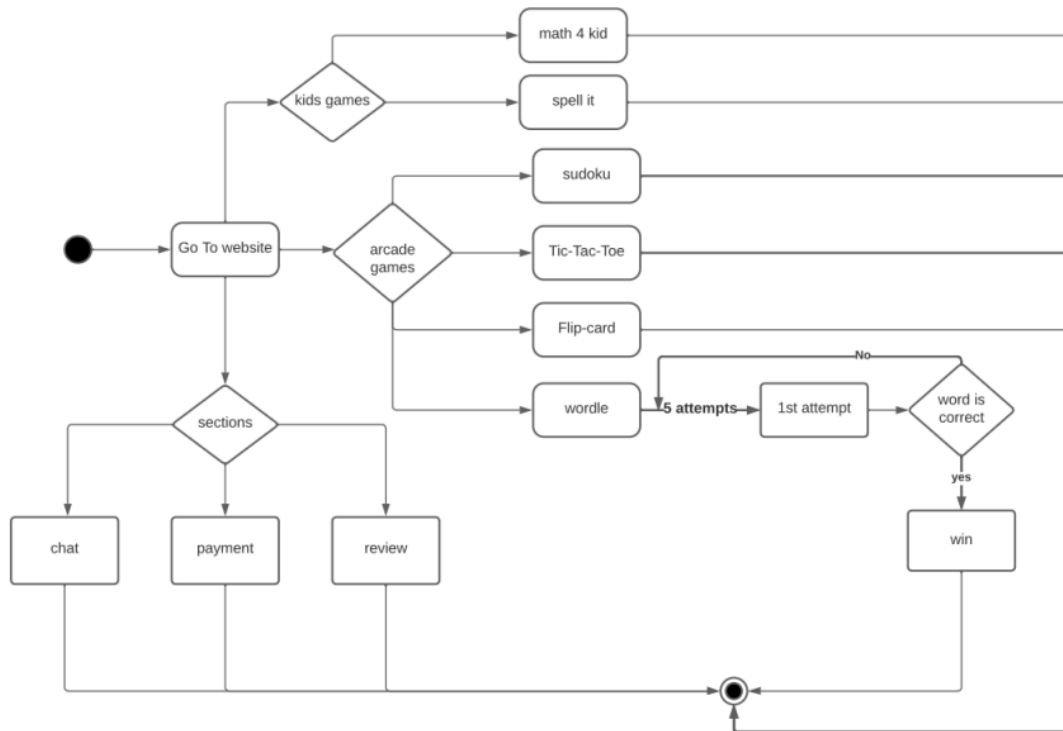
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System Maintenance & Update Table

No.	Field Name	Range of valid values for the field	Remarks
1	Maintenance ID	1 to 10000	Primary field
2	Maintenance Date	Date	Date of maintenance task
3	Maintenance Type	Numeric	1: Regular Maintenance 2: Game Addition 3: Emergency maintenance
4	Description	Up to 500 characters in length	Brief description of the maintenance task performed
5	Affected Services	Up to 200 characters in length	Services or features affected by the maintenance
6	Completion Status	Numeric	1: Completed 2: In progress 3: Postponed

High Level/Detailed Design (HLD/DD)

Overview of the system



Design Components

Role: User

- Home Screen
- Registration Screen
- Login Screen
- User profile Screen
- Game Selection Screen
- Feedback Screen
- Payment Screen
- Suggestion/Recommendation Screen
- Get in touch Screen



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Test-Plan (TP)

This Test Plan outlines a set of test cases to verify that the system meets the requirements specified in the RS document, covering aspects like registration, login, data accuracy, and system performance. The "Result" column will be updated after each test case is executed to indicate whether it passed or not.

No.	Test case Title	Description	Expected Outcome	The requirement in RS that is being tested	Result
1	Successful User Registration	The user should be able to register successfully with the platform by entering details as per the constraints	Registration should be successful and the user data should enter in to the system	RS1	Passed
2	Successful User Login	Seamless User Login to the system must be done with correct credentials.	Login should happen, but fail with an error 'Invalid Inputs' if invalid credentials	RS2	Passed
3	Successful User logout	System data should not be available after logging out of system	Logout process	RS2	Passed



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4	Platform Compatibility Test	Tests should be done to make sure the platform works accurately with various devices & browsers	No failures or discrepancies detected	RS8	Passed
5	Screen navigation test	Testing should be done for accurate flow of screens to ensure the usability	Easy navigation and simple GUI	RS5	Passed
6	Data accuracy	User data must be accurately stored and managed	Compliance with domain	RS7	Passed
7	Accessibility Test	Features such as text resizing, screen reader, etc. must work precisely	Assurance of accessibility of system	RS9	Passed
8	Multiplicity & Load Test	For users who wish to access the multiplayer functionality of the platform	Multi-user environment	RS4	Passed
9	Progress Tracking Test	The user progress tracking feature should work accurately	Accurate scores & progress	RS6	Passed
10	Payment System Reliability Test	The payment system must work precisely & securely as real money of the user is at stake	Transaction done successfully	RS14	Passed
11	Feedback Test	The user feedback submission, acknowledgement & response system should work properly	Feedback resolved	RS12	Passed



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12	Maintenance & updating	The regular maintenance of the platform & updates like game addition should happen whenever necessary	Maintenance task completed	RS11	Passed
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