System requirements:

***Admin:***

Format: System shall … *[What to do ?]* …. *[Supporting detail ?]*

*E.g: System shall list all questions with question statement, all multiple choices and correct choice*

* **Topic:**

1. System shall create a new topic including topic name
2. System shall list all existing topics including topic name
3. System shall update topics including topic name
4. System shall delete topics

* **Classification:**

1. System shall create a new difficulty (selecting one of the: Easy, Medium, Hard)
2. System shall list all existing difficulties including Easy, Medium, Hard
3. System shall update difficulty (switching between: Easy, Medium, Hard)
4. System shall delete difficulty

* **Question:**

1. System shall create a new question including Question statement, 4 choices with 1 correct choice, image (if any), topic, classification
2. System shall list all questions including Question statement, 4 choices with 1 correct choice, image (if any), topic, classification
3. System shall update question including Question statement, 4 choices with 1 correct choice, image (if any), topic, classification
4. System shall delete questions

**Public:**

* **Start the session:**

1. System shall allow user to start new session
2. System shall gather session name from user input

* **Select mode:**

1. System shall list all available test modes including *Exam Mode* and *Revision Mode*
2. System shall allow user to choose between *Exam Mode* and *Revision Mode*

* **Randomized ?**

1. System shall randomize all parameters including session time, topic, number of question if user choose *Yes*
2. System shall allow user to customize all parameters including session time, topic, number of question if user choose *No*

* **Select time:**

1. System shall allow user to choose testing time in hh:mm:ss format

* **Select topic:**

1. System shall list all available topic including *Topic Name*
2. System shall allow user to choose exist *Topic Name*

* **Start session:**

1. System shall gather the session start time in the format (MM/DD/YYYY HH:MM:SS)

* **Select No of question**

1. System shall display total number of questions exist in the question bank
2. System shall allow user to choose number of questions that satisfies the limit of the question bank

* **Next/previous question**

1. System shall allow user to continue to next question or forward back to previous question

* **View question**

1. System shall display to user the current question

* **Mark question**

1. System shall allow user to mark the question

* **Select answer**

1. System shall display answers for user to choose including 4 choices
2. System shall allow user to pick 1 choice per question

* **Go to question**

1. System shall allow user to jump to a specific question in the session

* **Built-in Calculator**

1. System shall read user’s input and execute addition operation
2. System shall read user’s input and execute substraction operation
3. System shall read user’s input and execute multiplication operation
4. System shall read user’s input and execute division operation

* **Submit**

1. System shall evaluate the user’s answer and compare it with correct answer
2. System shall gather the session end time

* **View result**

1. System shall display the session result including session name, status, no correct answer, total question, time taken, session time limit, session start time, session finished/paused time and result table)
2. System shall display separately the result table containing question number, marked ?, attempted ?, question statement, topic, classification, result (either use ***X*** for *incorrect* and ***V*** for *correct*)

* **Save result**

1. System shall allow user to save session result into separate place

* **Export result**

1. System shall allow user to export session result into a TXT file

* **Export each question individually**

1. System shall allow user to export the session question individually into a TXT file

* **Export entire session**

1. System shall allow user to export all session questions into a TXT file