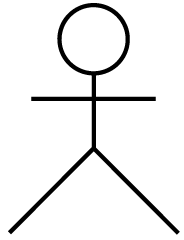
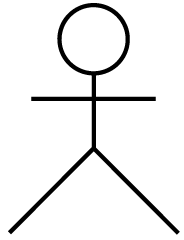
***Actors***

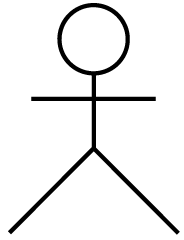
ASQ WebApp

ADMIN

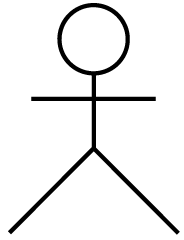
USER

***User Functions***



USER

***Admin Functions***



ADMIN

***Background Functions***

*System Functions*

***Function Flow***

*Inherited from previous version*

***User Functions***

|  |  |
| --- | --- |
| **Title** | User Registration |
| **Description** | First time user clicks the register tab to register |
| **Actor** | User |
| **Preconditions** | Non registered user |
| **Post-Conditions** | 1. User can access the practice test, exams for a known period of time  2. User information is saved in the database to be reviewed by  Admin |
| **Normal Flow** | 1. User clicks the register tab  2. Enters personal information a. First Name  b. Last Name  c. Email address d. Password  e. Date of Birth f. Address |
| **Exceptions** | 1. Email address is invalid  2. Date of birth is invalid |

|  |  |
| --- | --- |
| **Title** | User Login |
| **Description** | User can login to access his account |
| **Actor** | User |
| **Preconditions** | User needs valid username and password |
| **Post-Conditions** | 1. User enters the homepage and can take exams or practice tests, evaluate his performance, edit his information, or logout  2. Login initiates a session timer. |
| **Normal Flow** | User enter username, password and clicks login tab or hits enter |
| **Exceptions** | User name is invalid, password is wrong |

|  |  |
| --- | --- |
| **Title** | User Logout |
| **Description** | User logout from his account |
| **Actor** | User |
| **Preconditions** | User is logged in |
| **Post-Conditions** | User logout and enters the login page |
| **Normal Flow** | 1. User clicks logout  2. Session timeout |
| **Exceptions** | - |

|  |  |
| --- | --- |
| **Title** | Profile Edit |
| **Description** | User can edit his or her information |
| **Actor** | User |
| **Preconditions** | User is logged in |
| **Post-Conditions** | User information is updated in the database |
| **Normal Flow** | 1. User clicks the profile edit tab  2. User edits personal information |
| **Exceptions** | - |

|  |  |
| --- | --- |
| **Title** | User Practice |
| **Description** | User can take practice tests to evaluate his performance |
| **Actor** | User |
| **Preconditions** | 1. User is logged in  2. User is on home screen  3. User profile is in the subscription period |
| **Post-Conditions** | 1. User submits the practice test  2. User reviews the results |
| **Normal Flow** | 1. User is on the home screen  2. Clicks Practice  3. Choose a Practice test  4. Submits the tests |
| **Exceptions** | User subscription is ended |

|  |  |
| --- | --- |
| **Title** | User Exam |
| **Description** | User can take Exams |
| **Actor** | User |
| **Preconditions** | 1. User is logged in  2. User is on home screen  3. User profile is in the subscription period |
| **Post-Conditions** | 1. User submits the Exam  2. User reviews the results |
| **Normal Flow** | 1. User is on the home screen  2. Clicks Exam  3. Submits the tests |
| **Exceptions** | User subscription is ended |

|  |  |
| --- | --- |
| **Title** | User views History and review questions |
| **Description** | User reviews his/her exam results or practise results |
| **Actor** | User |
| **Preconditions** | 1. User is logged in  2. User is on home screen  3. User profile is in the subscription period |
| **Post-Conditions** | 1. User looks at the dynamic chart of his results |
| **Normal Flow** | 1. User is on the home screen  2. Clicks History |
| **Exceptions** | User subscription is ended |

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| --- | --- |
| **Title** | User Views Homepage |
| **Description** | User can choose options from the home screen |
| **Actor** | User |
| **Preconditions** | 1. User is logged in |
| **Post-Conditions** | 1. User can edit profile, take exam, practice test, view history or logout |
| **Normal Flow** | 1. User logged in  2. User clicks Home from current screen |
| **Exceptions** | - |

***Admin Functions***

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| --- | --- |
| **Title** | Admin Login |
| **Description** | Admin login information to maintain the User accounts |
| **Actor** | Admin |
| **Preconditions** | Requires username and password |
| **Post-Conditions** | Admin screen |
| **Normal Flow** | Admin enters username and password |
| **Exceptions** | 1. unassigned admin  2. incorrect password or username |

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| --- | --- |
| **Title** | Admin Logout |
| **Description** | Admin logout |
| **Actor** | Admin |
| **Preconditions** | Admin is logged |
| **Post-Conditions** | login screen |
| **Normal Flow** | Admin clicks logout |
| **Exceptions** | - |

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| --- | --- |
| **Title** | Admin Validates/Updates User Profile |
| **Description** | Every User’s information and subscription period is validated by the admin after registration or any information change |
| **Actor** | Admin |
| **Preconditions** | 1. Admin is logged-in  2. Pending User validation  3. Updates User information  4. Updates User subscription |
| **Post-Conditions** | 1. Admin sends user an email regarding the validation and subscription |
| **Normal Flow** | 1. Admin receives new user registration request or update information request  2. Admin reviews the new request and send confirmation  3. Admin enters password to update user information and subscription |
| **Exceptions** | Incorrect password |

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| --- | --- |
| **Title** | Admin Edits/Deletes questions for the test |
| **Description** | Admin can edit/delete the question in the database |
| **Actor** | Admin |
| **Preconditions** | 1. Admin is logged in  2. Admin clicks Edit/Delete tab |
| **Post-Conditions** | 1. Questions are saved |
| **Normal Flow** | 1. Admin clicks the Edit/Delete icon  2. All the database questions are displayed  3. Admin can select a question which he wants to edit/delete  4. A new page will popup if Admin selected to delete question  5. Admin saves the database |
| **Exceptions** | There are no questions in the database |

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| --- | --- |
| **Title** | Admin adds questions for the test |
| **Description** | Admin can add questions in the database |
| **Actor** | Admin |
| **Preconditions** | Admin is logged in |
| **Post-Conditions** | All the questions are added to the database |
| **Normal Flow** | 1. Admin clicks the Edit icon  2. All the database questions are displayed  3. Admin can select a question which he wants to edit  4. A new page will popup where Admin can edit the question  5. Admin saves the database |
| **Exceptions** | - |

***Additional Functions***

*New functions*

|  |  |
| --- | --- |
| **Title** | Two Factor Authentication |
| **Description** | First time user ID activation after submitting registration form |
| **Actor** | System |
| **Preconditions** | Non registered and Non Active user |
| **Post-Conditions** | User Account Activated to use the Application |
| **Normal Flow** | 1. User clicks the Submit Button 2. Application sends Activation link email to registered email id |
| **Exceptions** | 1. Activation Email not received  2. Invalid Activation Token |

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| --- | --- |
| **Title** | Database Encryption / Decryption |
| **Description** | Data encryption and Decryption |
| **Actor** | System |
| **Preconditions** | Database and Tables created and connected |
| **Post-Conditions** | 1. Data displayed properly 2. Data validated properly |
| **Normal Flow** | 1. Data sent to the Database 2. Function Encrypts and stores in Database 3. Data received from Database 4. Function Decrypts and uses in the Application |
| **Exceptions** | 1. Database not found / connected 2. Data not Encrypted 3. Data not Decrypted |

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| --- | --- |
| **Title** | Bulk Import Question |
| **Description** | Imports Large amount of question to the Database |
| **Actor** | Admin |
| **Preconditions** | 1. Database and Tables created and connected 2. Logged in as Admin 3. Admin User on Manage Questions Page 4. Assumes Admin has properly structured Import File |
| **Post-Conditions** | 1. Questions Imported and Displayed on the Application |
| **Normal Flow** | 1. Admin Clicks Import File 2. Selects File to be Imported 3. File Contents Uploaded to the Database |
| **Exceptions** | 1. Import Failed |