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| **Use Case Name** | Login to Program | |
| **Brief Description** | User clicks Login Button on Main Menu to bring up the form.  User inputs username and password and presses Login Button.  System checks username and password vs ones stored in the database.  If the details are correct the user will gain access to the program and their stored data. | |
| **Actors** | User | |
| **Pre-conditions** | Account must exist | |
| **Post conditions** | Allows user access to Program with their saved data. | |
| **Flow of activities** | Actor | System |
| 1. User presses Login Button on homepage. 2. User enters their Username and Password and presses the Login Button. | * 1. Login Form Appears   2.1 System verifies Username against Username list in database.  2.2 If username exists, UserID is saved and the password is verified against the password with the same userID.  2.3 Show user to ‘Selecting Level of Study” screen. |
| **Exception Conditions** | * 1. If username doesn’t exist return “Username Doesn’t Exist or is wrong”.   2. If Password doesn’t verify against stored password return “Password is wrong”. | |

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| **Use Case Name** | Register an account | |
| **Brief Description** | User inputs their chosen username and password into the appropriate boxes.  System checks if the username already exists.  If the username doesn’t exist, then a new account is made, and they’ll be automatically transferred to the ‘Selecting Level of Study’ screen. | |
| **Actors** | User | |
| **Pre-conditions** | Username must not exist. | |
| **Post conditions** | New user is created in the database. | |
| **Flow of activities** | Actor | System |
| 1. User inputs username and password into the text boxes. 2. The user presses the Register Button. | * 1. Validation of username and password   2.1 System checks against its already stored usernames.  2.2 System adds a new user to the database.  2.3 Transfer user to ‘selection of study’ screen. |
| **Exception Conditions** | * 1. If username or password contains characters other than Letters or Numbers return “Username and Password must only contain Letters or Numbers” before checking against Database.   If username is already contained within the database, return “Username is taken”. | |

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| **Use Case Name** | Guest User | |
| **Brief Description** | If the user doesn’t wish to make an account or Login, they can choose to be a guest, this means all their scores won’t be scored and they can use the program anonymously. | |
| **Actors** | User | |
| **Pre-conditions** | N/A | |
| **Post conditions** | N/A | |
| **Flow of activities** | Actor | System |
| 1. User clicks on Guest Button | 1.1 System transferrers User to ‘selection of study’ screen. |
| **Exception Conditions** | None. | |

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| **Use Case Name** | Selecting Level of Study | |
| **Brief Description** | Each button links to a different Level of study.  e.g. If the user selects the ‘Year 3’ button, the Year 3 Science Subjects show up.  This is the same for all levels of study. | |
| **Actors** | User | |
| **Pre-conditions** | User must be Logged In or entered as a guest. | |
| **Post conditions** | N/A | |
| **Flow of activities** | Actor | System |
| 1. User selects their level of study year | 1.1 System transferrers User to ‘Different Subjects’ screen. |
| **Exception Conditions** | None. | |

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| **Use Case Name** | Selecting Subject | |
| **Brief Description** | Each button links to a different subject, these subjects have different topics in.  e.g.: If Year 3 is selected, then Physics, topics loaded in from the database will produce a list whereby only those that have those two fields in are shown. | |
| **Actors** | User | |
| **Pre-conditions** | User must be Logged In or entered as a guest.  User must have chosen a Level of Study. | |
| **Post conditions** | Topics are loaded in from database. | |
| **Flow of activities** | Actor | System |
| 1. User selects the subject they wish to study | 1.1 System transferrers User to ‘Select Topic’ screen. |
| **Exception Conditions** | None. | |

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| **Use Case Name** | Selecting Topic | |
| **Brief Description** | The user selects which topic they want to study from a list.  This then takes the user to the learning screen which contains all the information stored in the relevant topic Contents Database Column. | |
| **Actors** | User | |
| **Pre-conditions** | User must be Logged In or entered as a guest.  User must have chosen a Level of Study.  User must have selected a subject to study.  Program must have a working connection to the database | |
| **Post conditions** | Contents of topic are loaded in from database. | |
| **Flow of activities** | Actor | System |
| 1. User selects the topic they wish to study. | * 1. System transferrers User to ‘Learning screen’.   2. System Loads topic contents from relevant database column into the designated boxes in the Learning Screen. |
| **Exception Conditions** | * 1. If the database cannot load topic contents check database connection. If database connection is alive, reload data. If data cannot be loaded return “Sorry but this topic cannot be loaded at the minute, try again later or restart the program, sorry for your inconvenience”. | |

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| **Use Case Name** | Taking Quiz | |
| **Brief Description** | Once the user has completed learning the topic content there will be a Quiz available to take.  This will be accessed through a quiz button, once pressed the questions will be loaded in from the database.  Available answers will be displayed above each question, the user will then type the answer they think is correct in the corresponding boxes and continue. | |
| **Actors** | User | |
| **Pre-conditions** | User must be Logged In or entered as a guest.  User must have chosen a Level of Study.  User must have selected a subject to study.  Program must have a working connection to the database.  User must have selected a topic to study. | |
| **Post conditions** | N/A | |
| **Flow of activities** | Actor | System |
| 1. User clicks on the quiz button. 2. User inputs their answers into the text boxes provided. | * 1. System changes to a quiz screen.   2. System loads questions from database into set text fields.   3. System loads multiple choice answers into set text fields. |
| **Exception Conditions** | 1.1 - 1.3 If database cannot load the Quiz check database connection. If database connection is alive, reload data. If data cannot be loaded return “Sorry but this quiz cannot be loaded at the minute, try again later or restart the program, sorry for your inconvenience”. | |

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| **Use Case Name** | Marking Quiz | |
| **Brief Description** | Once they have completed the quiz they will click the mark button.  Clicking the Mark button will trigger a popup box to ensure they user has really finished the test.  Once they click ‘OK’ the program will check the users answers against the answers within the database and display a score. | |
| **Actors** | User | |
| **Pre-conditions** | User must be Logged In or entered as a guest.  User must have chosen a Level of Study.  User must have selected a subject to study.  Program must have a working connection to the database.  User must have selected a topic to study.  User must be on the quiz screen. | |
| **Post conditions** | Set completedTopic Boolean column in database to YES for relevant topic.  Update questionnaireScore INT column in database for relevant topic.  Set questionAttempted Boolean column in database to YES for each question answered. | |
| **Flow of activities** | Actor | System |
| 1. User clicks mark button. 2. User Clicks Close | * 1. System compares value inputted by user vs value stored in the answer column of the database for relevant questionID.   2. System updates completedTopic Boolean column to YES, questionnaireScore updated to equal the number of questions the user got correct, and questionAttempted Boolean column updated to YES for each question attempted.   3. System shows user their questionnaireScore.   2.1 System redirects user back to Topic Screen |
| **Exception Conditions** | 1.1 - 1.2 If database cannot load the Quiz answers check database connection. If database connection is alive, reload data. If data cannot be loaded return “Sorry but this quiz cannot be marked at the minute, try again later, sorry for your inconvenience”. | |