**Senior Project Requirement Document**

Requirement Types

1. Functional
2. Look and Feel
   1. Appearance
   2. Style
3. Usability
   1. Ease of Use
   2. Personalization and Internationalization
   3. Learning
   4. Understandability and Politeness
   5. Accessibility
   6. Convenience
4. Performance
   1. Speed and Latency
   2. Safety-Critical
   3. Precision or Accuracy
   4. Reliability and Availability
   5. Robustness or Fault-Tolerance
   6. Capacity
   7. Scalability or Extensibility
   8. Longevity
5. Maintainability and Support
6. Security
   1. Access
   2. Integrity
   3. Privacy
   4. Audit (*what information must be recorded to allow security checks.* e.g., logs)
   5. Immunity
7. Cultural

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| Requirement #: 1 | Requirement Type: 1 |
| Description: A database is created to hold the information needed for the website. | |
| Rationale: The data for tests, users, etc. need to be stored so that the website can access it at any time. | |
| Fit Criteria: A database is created. | |
| Dependencies: The website cannot run until this is complete. | Priority: 1 |

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| Requirement #: 2 | Requirement Type: 1 |
| Description: Web pages are made for the application to show that data from the database. | |
| Rationale: The web pages need to be made so that information from the database can be displayed. | |
| Fit Criteria: The pages for the website are created. | |
| Dependencies: Data can not be seen without web pages. | Priority: 2 |

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| Requirement #: 3 | Requirement Type: 1, 6i |
| Description: Users will be able to create an account so that they can use the website. | |
| Rationale: Users must be able to create accounts so that they can use the website. | |
| Fit Criteria: A user can register for an account. | |
| Dependencies: Users cannot take tests without an account. | Priority: 3 |

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| Requirement #: 4 | Requirement Type: 1, 6i |
| Description: Users/Admins will be able to log in to their account. | |
| Rationale: Users/Admins must be able to log in to the website to take tests and view results. | |
| Fit Criteria: A user/admin can log in to their account. | |
| Dependencies: Users cannot take tests without an account. Admins cannot create tests without being able to log in. | Priority: 4 |
| Requirement #: 5 | Requirement Type: 1, 6i |
| Description: Users/Admins are able to log out of their account. | |
| Rationale: Users/Admins must be able to log out, so others don’t use their account or their information. | |
| Fit Criteria: Users/Admins can log out of their account. | |
| Dependencies: N/A | Priority: 5 |

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| Requirement #: 6 | Requirement Type: 1 |
| Description: The admins are able to create a new test. | |
| Rationale: Admins need to be able to create tests for the users to take. | |
| Fit Criteria: Admins are able to create a new test. | |
| Dependencies: Admins cannot add or edit questions until the test is created. | Priority: 6 |

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| Requirement #: 7 | Requirement Type: 1 |
| Description: Admins will be able to edit and add questions to the already existing tests. | |
| Rationale: Admins need to be able to add questions or edit typing mistakes on the tests. | |
| Fit Criteria: Admins are able to edit and add questions to the tests. | |
| Dependencies: N/A | Priority: 7 |

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| Requirement #: 8 | Requirement Type: 1, 6i |
| Description: Admins will be able to choose if the test is private (requires password) or public | |
| Rationale: Tests can be private or public so teachers can use the application for class tests. | |
| Fit Criteria: Admins will be able to make tests private or public. | |
| Dependencies: N/A | Priority: 8 |
| Requirement #: 9 | Requirement Type: 6i |
| Description: Admin will be able to upgrade user accounts to admin accounts. | |
| Rationale: Admin are the only ones allowed to upgrade users to admins for security purposes. | |
| Fit Criteria: Admin can upgrade user accounts to admin accounts. | |
| Dependencies: N/A | Priority: 9 |

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| Requirement #: 10 | Requirement Type: 6i, 6iii |
| Description: Users and admins will be able to edit their account information. | |
| Rationale: Users/Admins can update their account information to make it current. | |
| Fit Criteria: Users/Admins can edit their account information. | |
| Dependencies: N/A | Priority: 10 |

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| Requirement #: 11 | Requirement Type: 3iii, 6i |
| Description: Users will have access to see their past public tests and their results. | |
| Rationale: Users will be able to see their past public tests and their results so they can learn from them. | |
| Fit Criteria: Users will be able to see all the past public tests they have taken and their results. | |
| Dependencies: N/A | Priority: 11 |

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| Requirement #: 13 | Requirement Type: 2 |
| Description: A color scheme is created and used throughout the website. | |
| Rationale: A color scheme makes the website more appealing to the user. | |
| Fit Criteria: A color scheme is created and incorporated in the website. | |
| Dependencies: N/A | Priority: 18 |

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| Requirement #: 14 | Requirement Type: 2 |
| Description: A logo is created for the website to use. | |
| Rationale: A logo will draw the attention of potential users. | |
| Fit Criteria: A logo is created for the website. | |
| Dependencies: N/A | Priority: 19 |