

Attendance System

Non-Functional Requirements

1. Usability
 - 1.1. Human factors
 - 1.1.1. The system shall conform to all human factors standards taught in this university program. The system should serve as a positive example that students may strive to emulate.
 - 1.2. Aesthetics
 - 1.2.1. The system shall conform to all aesthetics standards taught in this university program. The system should serve as a positive example that students may strive to emulate.
 - 1.3. Consistency in the user interface
 - 1.3.1. The system shall conform to all interface consistency standards taught in this university program. The system should serve as a positive example that students may strive to emulate.
 - 1.4. Online and context sensitive help
 - 1.4.1. The system shall include a custom help screen for each screen within the system on which the user may perform typical C-R-U-D functions. Simple display pages will not require a custom help screen.
 - 1.5. Wizards and agents
 - 1.5.1. No further requirements anticipated.
 - 1.6. User Documentation
 - 1.6.1. See 1.4.1 (above).
 - 1.6.2. A short tutorial video will be created for students to help them learn how to use the system effectively.
 - 1.7. Training Materials
 - 1.7.1. See 1.6.2 (above).
2. Reliability
 - 2.1. Frequency and severity of failure
 - 2.1.1. System shall fail no more frequently than once per week.
 - 2.2. Recoverability
 - 2.2.1. System shall be recoverable within one hour.
 - 2.3. Predictability
 - 2.3.1. No further requirements anticipated.
 - 2.4. Accuracy
 - 2.4.1. System shall be 100% accurate in its retention of attendance information that has been entered by student and confirmed by system.

3. Performance
 - 3.1. Speed
 - 3.1.1. No further requirements anticipated.
 - 3.2. Efficiency
 - 3.2.1. No further requirements anticipated.
 - 3.3. Throughput
 - 3.3.1. The system shall support up to 70 simultaneous student users.
 - 3.3.2. The system shall support up to 5 simultaneous instructor users.
 - 3.4. Response time
 - 3.4.1. System screens shall exhibit no greater than 2 second response time.

4. Supportability
 - 4.1. Testability
 - 4.1.1. There is a preference for systems that will include a suite of unit and integrations tests based on a testing framework such as JUnit.
 - 4.2. Extensibility
 - 4.2.1. The system must be extensible by building custom software that may share the same databases.
 - 4.3. Adaptability
 - 4.3.1. No further requirements anticipated.
 - 4.4. Maintainability
 - 4.4.1. There is a preference for systems that will include the use of source code version control as provided in systems like Git or Subversion.
 - 4.5. Compatibility
 - 4.5.1. There is a preference for systems developed using Java SE and JEE tools.
 - 4.6. Configurability
 - 4.6.1. System shall be configurable such that courses taught at more than one institution may be serviced by the same system instance.
 - 4.7. Serviceability
 - 4.7.1. System shall be unavailable at least one hour per day to allow for maintenance, upgrades, and repairs.
 - 4.8. Installability
 - 4.8.1. No further requirements are anticipated.
 - 4.9. Localizability (internationalization)
 - 4.9.1. At this time, only support for U.S. English is anticipated.