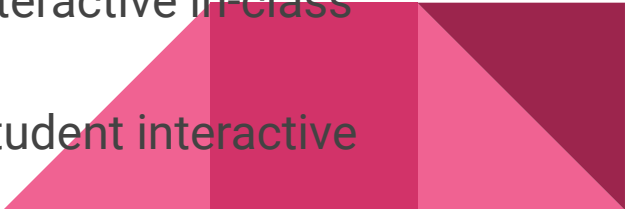# Student Engagement System

Project Management lab 5
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Ibaada Arif (100655270)

Problem

- Although Professors enforce measures to ensure healthy participation from students and interactive relationships, there are still numerous reasons that prevent students from attending lectures, negligence and unconcern to schoolwork.
- Attendance can be very low due to the lack of student classroom engagement

Objectives

- Purpose a project that will solve student attendance issue by providing a blackboard - integrated application
- Focus on interactive in-class activities - mastery orientation so that students are able to pursue an activity for the main purpose of learning and understanding rather than trying to obtain good grades
- Also create an online discussion on blackboard for students to interact online over the material that was covered during class. Students will be able to ask their peers questions and discuss topics outside of school hours
- Thus three main objectives; collaborative learning, interactive in-class activities, and online discussions
- Proposed project offers significant advantages for student interactive learning through an enhanced engagement system
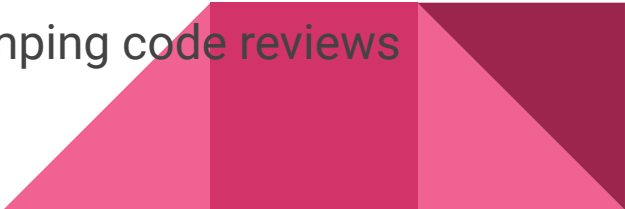
Measures of Success

Measure of success through five methods:

1) Scheduling - graphical visualization of major milestones and corresponding dates
2) Quality Measurement - used throughout design, development and testing stages, allows for evaluation of all standards and regulations ultimately preventing errors in the system
3) Cost Analysis and Cost Management - maintain financial aspect of project
4) Measurement of Stakeholder Requirements - Allow feedback from stakeholders at each stage to ensure constant evolution of product resulting in satisfied end-users
5) Measure final iteration and product delivery - Compares final product to initial scope of the project. It will measure whether the final product lies within objective the initial framework

Risk Associated with Project

There are risks associated with each activity

1) Activity - Planning: Risk of outlining wrong expectations and the system does not have high usability
2) Activity - GUI Structure: The graphical user interface may add complexity and may compromise security and a poorly developed GUI can result in poor experience for users
3) Activity - Unit Testing: The code may be organized differently to conduct test and the tests could become more complex than actual mode
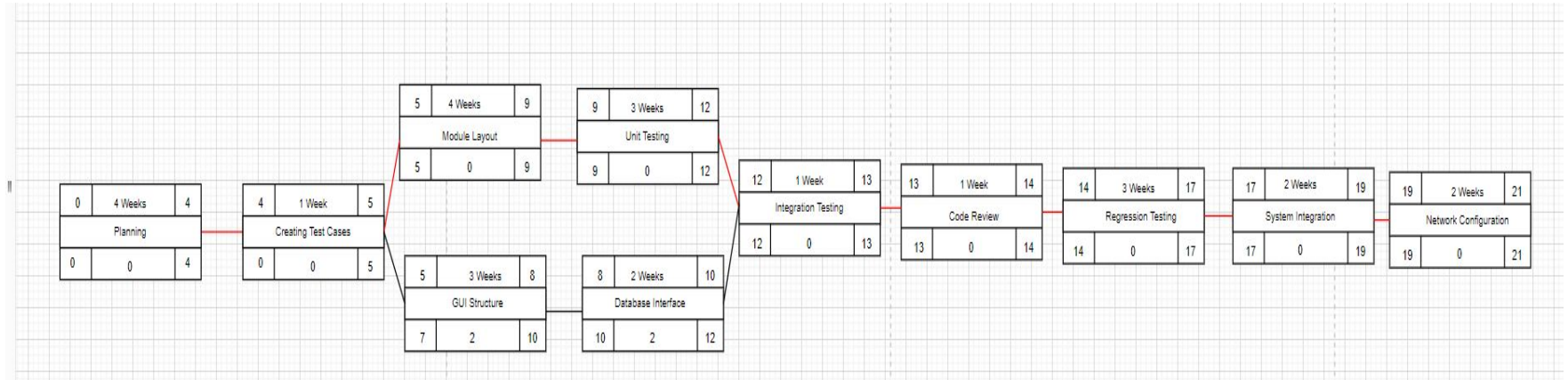4) Activity - Code Review: Human error and Rubber stamping code reviews

Risk Associated with Project

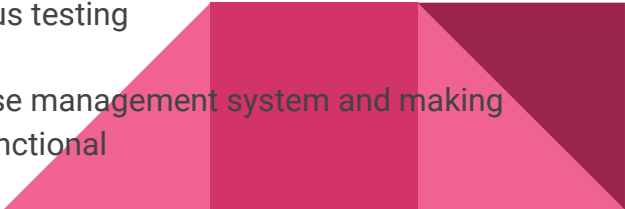5) Activity - Regression Testing: Time consuming and Time bound

6) Activity - System Integration: Coupling which is the measure of the degree of interdependence between modules and also risk of essentiality when a key feature will be unavailable if the component does not work properly

Activity Diagram

Steps Needed to Complete Project and Infrastructure Requirements

1) Planning and understanding user requirements

2) Creating test cases - Coming up with scenarios that students may encounter based on their requirements

3) Developing the user interface for the user and connecting student database to our web application as a means to track their progress

4) Unit/Integration testing - Testing the application by itself followed by testing the system integrated with the course management system

5) Code Review/Regression Testing - Before finalizing our application, we'll conduct a code review to check quality of code and regression tests to make sure the new additions in code have not affected previous testing

6) System integration/Network Configuration - Integrating our application to the course management system and making any appropriate network connections and operations between the two systems are functional

Infrastructure

- Cloud Infrastructure
- The infrastructure required we will need is AWS **Cloud** to transform digital learning and to meet our objective of collaborative learning, interactive in-class activities and to host online discussion, to ultimately solve student attendance issue

Resource Allocation for Activities

Activity	Resources	Start date	End Date
Planning	Matthew Brown, Durreshahwar Arif, Ibaada Arif	February 1st 2019	March 1st 2019 –February 22nd is family day. No work will be done that day
Creating Test Cases	Durreshawar Arif	March 1st 2019	March 8th 2019
GUI Structure	Ibaada Arif, Durreshahwar Arif	March 8th 2019	March 29th 2019
Module Layout	Ibaada Arif, Durreshahwar Arif	March 8th 2019	April 6th 2019
Database Interface	Matthew Brown, Durreshahwar Arif, Ibaada Arif	March 29th 2019	April 12th 2019
Unit Testing	Matthew Brown	April 6th 2019	April 27th 2019 -April 19th is Good friday No work will be done on that day
Integration Testing	Matthew Brown	April 27th 2019	May 4th 2019
Code Review	Ibaada Arif, Durreshahwar Arif	May 4th 2019	May 11th 2019
Regression Testing	Matthew Brown	May 11th 2019	June 1st 2019 -Victoria day is May 20th No work will be done on that day
System Integration	Matthew Brown, Ibaada Arif	June 1st 2019	June 15th 2019
Network Configuration	Matthew Brown, Durreshahwar Arif, Ibaada Arif	June 15th	June 29th 2019

Gantt Chart