Graduate Student Information System (gSIMS)

Walkthrough

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Outline

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Project Inception

- Advisor: Dr. Hanif Ladak
- Concerned with managing students in the graduate program for BioMedical Physics.
- Current system has lots of problems.
  - Calculations and updates are mostly manual.
  - Need to keep the paper copies of meetings.
  - Takes lots of time to create reports.
  - Hard to track when a student must have a requirement done.

Current System

Demo of the Current System.

Project Organization

Two components of the problem:

- (ECE4416) Business rules:
  - Graduate program milestones and dataflow.
  - Direct interaction with the User.
- (SE4450) Technical requirements:
  - Provide the functionality for the User Interfaces.
  - Adhere to required constraints.

Scope

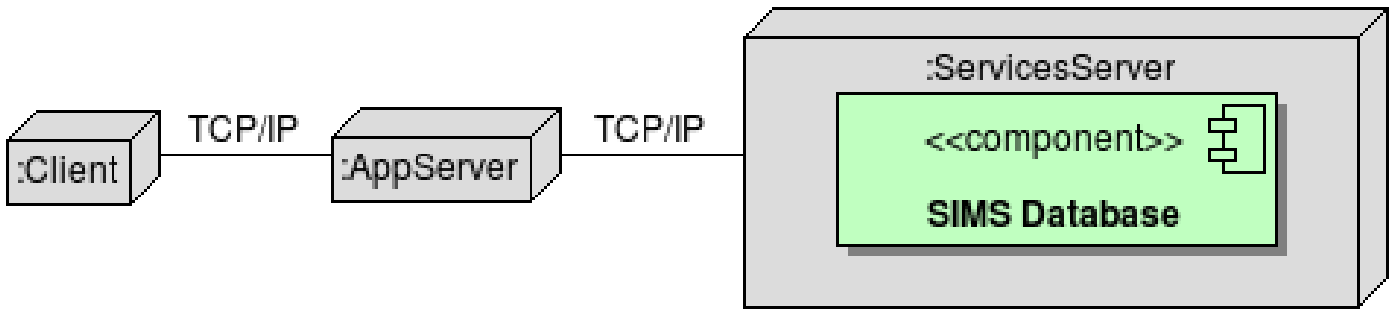

Figure: The proposed system

Outline

Interfaces

Graphical User Interface

Electrical Device Interface

System Features

Constraints

Outline

Oranizing Data

Conceptual Model of the Student

Critical Assumptions

Outline

Hardware

Software

Network Protocols and Schemes

REST Web Applications

Perl Batch Services

Outline

System Features

Intrinstic Data of a Student

Role Based Authentication

Outline

System Features

E-Signature Clien

Outline

Unit Tests

Integration Testing

System Integration Testing

Summary

- Requirements and Analysis has received direct user feedback.
- Architecture based of the Analysis has been clarified and prototyped.
- The iterative Software Life Cycle has produced useful work quickly and with less effort.
- A strong emphasis on 3 testing levels is present from the starting.