IST Senior Development Project - Project Charter

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1 Basic Information

1. Project Name — ISTE Senior Project
2. Project Manager — Daniel Dorrity
3. Project Customer — RIT IST Department
4. Project Sponsor — Professor Zilora
5. Development Team:
   - Backend Developer: — Andrew Wood (azw4742@rit.edu)
   - Frontend Designer: — Tomomi Takeuchi (txt7205@rit.edu)
   - Frontend Developer: — Frano Cavelis (fxc8345@rit.edu)

2 Purpose

The purpose of this project is to bring the faculty directory for the IST department up to date with current and modern technology. The IST department finds it difficult to update the faculty board every time a new professor is added or removed from the department. Because of this, they wish to implement a technological solution that would allow this information to be updated with greater ease.

We believe that implementing such a practical solution would benefit all the students, staff and faculty members in an effort to digitize school information, providing a new step for the campus to evolve and enhance student life.

Not only would this benefit the current member of RIT, but it would also show visitors and other schools our willingness and dedication to a student's campus life. Our plans are not constrained by the original idea. We want to further enrich this project by adding what we deem vital features to the main application.

3 Goals and Objectives

The IST department is an essential part in the grand RIT information scheme. What if we make a part of their job easier, while at the same time we incluse the students as our prime users? The automation of this system will make the information channels much smoother and more responsive. New students will acquire new information about the campus and will ease their integration into a new life as a student, while more seasoned students will use the application to see any new updates in the department's information collection. This presents us with a few main goals of the application:

1. A touch screen display will be attached to the wall near the atrium stairwell on the second floor
2. The time and effort it takes for IST staff members to update, add, or remove professor information will be greatly reduced
3. The time it takes for a student to find information about a professor, including a map to that professor's room, will be greatly reduced
4. The time it takes for a student to locate, and get directions to, a specific lab or classroom will be greatly reduced

4 Success Criteria

When a student is satisfied with his/hers received information, and then further impressed by our extra features, ease of use, and lightning-fast operation, then we are also content with the outcome. The critical point we want to achieve is that there will be no issues in the areas of: visual guidance, execution speed, and data coherence and display. The goal we strive for is to make the user's first interaction feel like he/she is used to it and to make it a natural handling of an advanced yet user-friendly application. This presents us with these stated success criteria:

1. All students must be able to easily use the product. This includes interaction and processing of presented information
2. IST staff members must be able to learn and use the product with great ease. This includes interaction, processing, and understanding of verification of the presented and entered information
3. The IST department is satisfied with the look, use and implementation of the final product. This includes design, user interaction and presentation of the data

5 Context

This project has the potential to carry into other departments and even other colleges at RIT. This project could strengthen relationships between the IST department and other colleges, as other colleges may see it, like the idea, and then use the currently implemented system to build their own version.

Developing technologies that replace relatively old methods of a campus is the next step in creating a futuristic environment in which the students feel like a part of the ever self-innovating 21st century. This will consolidate a way of providing a new and interesting educational experience for students of all ages.

6 Dependencies

In no particular order:

- A Raspberry Pi must be equipped with Ubuntu and any broswer
- FMS must install the nessary touch screen display and Raspberry Pi. This includes power, network and safety measures.
- IST staff must be introduced and taught how to use the technology
- The software must pass unit and performance testing with a 95% success rate
- Stakeholders approve of all wireframes
- The software passes student based UAT

7 Scope Specifications

7.1 Web Application Requirements

1. A user will be able to see information pertaining to a specific professor:

   Email

   Office Hours

   Office Numbers and Location

   Phone Number

   Picture

   Title

2. A user will be able to view a map of the IST professor offices and labs/classroom and see how to navigate to those rooms

   The user can load the specific map for that professor or room on their smart phone and have the map in their hands

3. An IST staff member will be able to assign users permissions in order to add update and delete professor information

7.2 Physical Requirements

1. A Raspberry Pi 2 model B
2. A 40-inch Samsung touch screen display

7.3 Implementation

1. Access to the ist.rit.edu domain to attach the web application to
2. FMS to attach and install the monitor and Raspberry Pi

8 Out of Scope Specifications

1. An ID reader that will read the student's RIT ID and load their schedule. From this, it would display all classrooms and professors pertaining to that department.
2. A second display, most likely a tablet, at the opposite end of the building, so students do not have to travel from one side of the building to the other more than once

9 Assumptions

1. FMS will install the Raspberry Pi and the monitor correctly
2. The IST department will be able to pay for the monitor and installation
3. RIT students will use the implementation

10 Constraints

1. FMS project schedule will determine when they are able to install the monitor and Raspberry Pi
2. IST budget can constrain when they are able to pay for the implementation
3. IST schedules can limit review of wireframes and software

11 Risks

1. Students will not use the application
2. FMS refuses to, takes too long, or fails to properly install the implementation
3. IST may never be able to pay for the implementation

12 Budget Estimations

- Raspbery Pi Starter Kit $70 USD
- Samsung 40-inch touch screen display $1,200 USD

13 Stakeholders

1. Rhonda Baker-Smith: IST staff member in charge of updating and adding professor information
2. Professor Zilora: Project sponsor
3. Team Orange: Software development team
4. IST Students: Main users of the application

14 Communication Plan

Daniel Dorrity, as project manager, will send emails to all stakeholders, excluding students, when wireframes are complete, requesting approval and or changes. If those emails are not responded to within 3 days, the chance to make any major change suggestion will not be heard. Daniel will send a condensed 4UP chart ever two weeks. This chart will explain what the development team has completed and is currently working on. It will also detail and issues or risks, and any needs as well. All stakeholders will be expected to read these emails, and respond, addressing any concerns they may have.

15 Qualifications

15.1 Frano Cavelis

Education

- 2012 - Present: RIT Croatia - Information Technology
- 2008 - 2012: Tourism and Hospitality school Dubrovnik - Hotel and Tourism

Work Experience

- RIT Croatia - IT support Summer 2015
  Offered professional IT support to all staff and faculty members, prepared classrooms and private rooms for meetings, operated the Polycom system, helped new IT and IHSM candidates during boot camp, assisted newly arrived professors at the campus, reorganized technical equipment through the campus, installed new network devices, was involved in several marketing projects
- RIT Croatia - Student Helper Fall 2014
  Made sure the labs were organized and operational, helped students, staff and professor with relevant information, intervened with technical failures, moved the Polycom to different classrooms where he is needed and set it up, relocated other technical equipment, attended presentations and events for technical support, worked at the reception, filmed videos for the RIT Croatia marketing department on multiple locations, created multimedia on a professors request
- RIT Croatia - IT Support Summer 2014
  Helped the staff, professors and students with technical and other issues, set up and maintaining classrooms, labs and the Polycom, gathered information on current technical inventory and procuring reports on technical equipment, browsed for new equipment to possibly order, reformatted and installed new software

- Hotel Bellevue - Waiter Summer 2013
  Served a large number of hotel guests, carried and cleaned equipment, operated a cashier, delivered food item to guests' rooms

Software Skills

- Java, C#, XHTML
- HTML, CSS, JavaScript
- jQuery, PHP

15.2 Andrew Wood

Education

- RIT - Information Technology, Minor in Human Communications

Work Experience

- RIT - Web Developer May 2014 - Dec 2014
  Designed, developed and implemented a web platform along with administrative tools for the Interactive Games and Media department at RIT. Developed a system of dynamic document generation to automate time consuming tasks. Developed a logging system of company inventory to keep track of crucial workplace items. Heavy influence in the design of a database that supported essential tasks and stored vital company information.

Software Skills

- Java, C#, Python, Objective-C
- Heavy SQL experience
- PHP, JavaScript, jQuery, AJAX
- HTML, CSS, NodeJS, Cordova
- PhoneGap, Android SDK

15.3 Tomomi Takeuchi

Education

- RIT - Information Technology
- Sophia University - CIEE Arts and Science Study Abroad

Work Experience

- Japanese Voice-Over Fall 2015
  Voiced over a presentation and tutorial video in Japanese for a new medical equipment line
- Japanese Teacher Spring 2015
  Built and taught a personalized curriculum corresponding to students' level of Japanese
- Application Development Engineer Assitant Winter 2014
  Supervised debugging team and revised interfaces and JavaScript code before submission. Created application content using Adobe Photoshop, Illustrator, Flash and InDesign. Compiled completed components using XML

- Application/Website Developer Summer 2014
  Developed an education mathematics application for elementary level children. Inputted and edited data using various Adobe software. Built website interface with support of Adobe Dreamweaver.
- Homepage Designer Summer 2013
  Designed and implemented a multi-page website in HTML and CSS
- Research Assistant Spring 2013
  Recruited test subject candidates through social media and on-campus. Proctored computer based Japanese tests for data-collection. Provided technical support with testing software and collected data files

Software Skills

- Java, C#, HTML, CSS, MySQL
- JavaScript, jQuery, PHP, XML

15.4 Daniel Dorrity

Education

- RIT - Information Technology, Minor in Mathematics

Work Experience

- RIT Student IT Office June 2015 - Present
  Team lead and technical project manager. Tasked with gathering technical requirements and determining risks and benefits of multiple solutions at a single time. Project manager for a team consisting of multiple members of RIT ITS. In charge of leading meetings and making sure required work is done on time.
- RIT Student IT Office Jan. 2015 - June 2015
  Web developer tasked with programming features for student enrollment application. Full stack development, ranging from Java Spring back end development, to AngularJS front end development. Small amounts of HTML and CSS modifications.
- RIT Corner Store Sept. 2013 - Dec. 2014
  Student manager in charge of making sure students are doing their assigned tasks. In charge of the store and any major decisions while supervisors are away from the building.

Software Skills

- HTML, CSS, JavaScript, AngularJS, Grunt
- Gulp, Gradle, Ionic, Swift, MySQL
- Java, C#, Python, UML, LaTeX