Form Buster Project Plan

Project Members

Grace Dolphy - gdolphy2015@my.fit.edu
Raphael Setin - rsetin2015@my.fit.edu
McNels Sylvestre - msylvestreph2016@my.fit.edu

Faculty Sponsors

Dr. Eraldo Ribeiro - eribeiro@cs.fit.edu

Client

Dr. Philip Chan - pkc@cs.fit.edu

Meeting(s) with the client for developing this plan

8/31/18

Goals & Motivations

Form Buster's main goal will be to replace the current form process which requires physical forms to be transferred in between departments manually. The issues that arise from the manual process is that students do not know the status of the form (such as who has signed the document, if it has been approved, or if it's been lost in transit), which staff members need to sign the document, and when to find a good time to visit the staff member. In addition to this, Form Buster will make the registration advising process between the faculty advisor and the student verifiable.

Approach

A student coordinator may enter in the student's name and search for a student's record; this record will contain a list of the student's pending, approved and declined forms. A student coordinator will also be able to start a form for a student and non prefilled information may be entered in by the student coordinator.

A student may start a form, fill in any non prefilled information, and sign and submit the form for approval(s). If a form has been started by a faculty member or a student coordinator, the student will be notified by email, and will be able to add information to the form, sign and submit the form for approval(s). The student will receive email tracking notifications when the form has been signed by a staff member, a reason for the form to be declined, or a notification of approval; the student may also view the status of a form in their account, in addition to completed forms marked as approved or declined. If a faculty member has not made a decision (approval or

disapproval with reason), the student will be given the option to pick a different faculty member to have sign the document instead, the student will also be given this option when a form gives the option for a student to get approval from any faculty member, or if the faculty member is on vacation.

A faculty member may do the same tasks as a student coordinator. In addition to these, the appropriate faculty member will receive a notification when a student has submit a form for approval. The faculty member can then decide if he'd like to sign and submit the form, or if he'd like to decline and provide a reason. If the faculty member has not made a decision within a day of any forms, the faculty member will receive a daily email notification to remind them of their pending forms, which can also be viewed in their account. Due to faculty members not being available all the time, faculty members may set their account to on vacation.

An office/person designated as the final action for an approved form (such as the Registrar), will be notified by email when a document has received its final approval. The office/person will also receive an action list, which can be viewed from their account. Like others, the office/person may look up the student by name to view a list of pending and completed forms.

Novel Functionalities

Form Buster aims to completely digitalize the current form submission and management process. The system will bring a tracking feature that will allow users to check the status of their forms as they travel to the different persons/offices who need to sign them. Said forms will be partially kept in the database, so that any problems that may occur with someone's graduation (i.e. taking the wrong class) will be trackable; the forms themselves won't be in the database, as they are available on FIT's website, only the information filled in by the users. The system will also facilitate students in order for add/drop classes for upcoming semesters, by "flipping the flag" (verification of advising). Instead of having the student coordinators to start the forms, now everybody would be able to start the forms. Lastly, the system will use a digital type of signature, in which logging in the system will be authentication by itself for that user.

Technical Challenges

For this project, we plan on building a database to save and organize the records that will be processed through the system. That will be a challenge since only one person in the group has experience in database systems. Our second challenge will be with designing and implementing the web interface of the system; again, only one group member has experience in that area. The third challenge for us will be the smooth integration between the frontend and backend, as well as securing the records of the users, as that will be completely new for us.

Milestone 1 (Oct 1): itemized tasks:

- Investigate and select tools/frameworks/programming languages/databases to be used
- Create a sample website and database using the tools/packages/... to determine
 if they are sufficient for the project
- Resolve our technical challenges (Get familiar with the needed tools)
- Compare and select collaboration tools for software development, documents/presentations, communication, task calendar
- Create Requirements Document
- Create Design Document
- Create Test Plan

Milestone 2 (Oct 29): itemized tasks:

- Implement and test database mock-up
- Implement, test, and demo login pages and authentication
- Incorporate Registration Forms and forms web pages
- Implement, test, and demo the views for the different categories of users (Student/Student Coordinator/Faculty/Staff)
- Implement, test, and demo e-signature for Students and Faculty

Milestone 3 (Nov 26): itemized tasks:

- Implement, test, and demo database lookup for student records
- Implement, test, and demo email notifications feature
- Implement, test, and demo form tracking feature

Task matrix for Milestone 1

Task	Raphael	Grace	McNels
Compare and select Technical Tools	Web tools	Database	Web/database integration
Sample website & database	Frontend	Database calls	Backend
Resolve Technical Challenges	HTML, CSS, Javascript	Firebase, AngularJS	AngularJS, Firebase

Compare and select Collaboration Tools	Programs	Communication, task calendar	Documents/present ations
Requirement Document	Write 25%	Write 25%	Write 50%
Design Document	Write 50%	Write 25%	Write 25%
Test Plan	Write 25%	Write 50%	Write 25%

Approval from Faculty Sponsor

"I have discussed with the team and approve this project plan. I will evaluate the progress and assign a grade for each of the three milestones."

Signature: Da	ate:
---------------	------