

# Senior Software Report 3

Team 1 – TUTOR Me

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Current System Reports

## **If a current system exists, a Comprehensive Narrative on the Current System and its Operation History and Users and a Ranked List of the Current System's Major Faults and Problems**

### **Current Systems**

#### **Honor Code Website**

The academic information section of our application will contain general information about the Honor Code Policy at Trinity. It will include a brief summary, frequently asked questions, contact information, etc. Although all of this information can be found on the Honor Code web page of the trinity site it is somewhat hard to find. Also, the web page for some reason was not updated during the last website overhaul. The information is very scattered and verbose. We hope to provide utility by putting all of this information in one place, easy to find, and in terms that everyone can understand.

#### **Trinity Website**

The academic information section of our application will contain an academic calendar and other important academic information. Although this information is available on the Trinity site it is somewhat scattered and hard to find. There is a lot of information on our website that is geared to prospective students instead of current students. Our application will put the Academic Calendar in a format that is easy to view on mobile devices, instead of having to download the PDF page from the website, which does not read easily on the mobile device. We hope to include the functionality of exporting important dates to your devices native calendar application providing even further utility. Also, the Trinity website simply contains no information on peer tutors. It states to contact each department individually to obtain more information.

#### **Facebook Events/Groups**

A lot of students currently use Facebook to organize events or to set up certain groups. However with Facebook, there is no easy way to find people that are in your class in the hopes of organizing a study session. You have to be friends with the person outside of class in order to invite them to an event or to add them to a group. Our application gets rid of this requirement and allows you to see an of the study sessions that might be going on. This allows students of a particular class to study together without having to worry about getting everyone's contact information and going through the process of finding each other on Facebook and adding them as a friend. It is also possible that while you might want to study with this person/group of people you might not want to necessarily maintain a friendship with them outside of class.

### **Our System**

Our system opens users right away to the list of tutors for their respective university. From this view they are presented with summarizing details of each

tutor and have the option of viewing detailed information by clicking on the table cell itself. The users can also implement search using the search bar at the top of this page.

The second tab of our application presents the users right away to a list of study sessions that are planned for their university. This page looks very familiar to the tutor page (by design) for the sake of consistency. They have the same option of clicking the cell of an individual event to view information like when, where, who has RSVP'd and to RSVP themselves. The search bar is again presented at the top of this view just like in the Tutor View. The user also has the option to add an event by pressing the plus button at the top of the navigation bar.

The third tab of our application presents the user with the academic information for their university. Here they can view the academic calendar, as well as the Honor code, the purpose and the philosophy behind it, and frequently asked questions about the Honor Code itself.

The fourth tab of our application presents the user with the ability to declare themselves a tutor and the required form to fill out all of the information that is required of them when deciding to become a tutor. This is also where they would edit any information that might change about them on their tutor page. Also on this page is a list of the events in which they are the organizer and a list of the events in which they have RSVP'd to. Here they would be able to also edit any of the details for the events in which they are the organizer. This page also hosts other application settings like settings for notifications as well as an about section for our application that will include credit information, version, and an avenue of getting support regarding bugs or general usage of the application.

### Current Faults of Our System

The only problem that we have seem to come across with our system is trying to keep the application's design consistent across platforms. Our application was originally designed for iOS and then adapted for Android. There are some UI elements that are available on one platform and not on the other. We have to do our best to overcome this problem during the entire development of our system. We will also have the constant battle of balancing design similarity without breaking the conventions and normality's of each system. The users of iOS and of Android are used to very different experiences and this must always be on our minds if we want to be successful in creating an application that is easy to use and that the user can understand right away on both platforms.

### A Full Cost Estimate for the New System

**Lines of Code:** We have estimated our anticipated lines of code based on James' previous Trinity Visit application. This application has a tabviewController like ours

and contains some of the same elements. The total count for lines of code of the Trinity Visit application is 3,018. We anticipate that while the projects are similar, TutorMe will be more involved and complex and we have decided to multiply this number by 1.5 in order to accommodate this. So we are estimating around 4500 lines of code for each application, or ~9,000 lines of code for both the Android and iOS versions combined.

**Effort in person months:**  $E = 5.2 * (9)^{.91} = 38.4$

**Project Duration (Calendar Months):**  $D = 4.1 * (9)^{.36} = 9.04$  months

**Staffing:**  $S = .54 * (38.4)^{.6} = 4.81$

**Pages of Documentation:**  $DOC = 49 * (9)^{1.01} = 450$  pages

We are basing our cost estimate on project duration (9 months), which is equal to about 36 weeks and the hourly rate of \$20/hour. If each member works an average of 7 hours per week on this project then this is total of 35 hours per week. 35 hours per week times \$20/hour = \$700. \$700/week times 36 weeks gives us our total cost estimate of \$25,200. We seem to have the correct number of members in a team as our estimate of 4.81 is very close to 5, the number of members on our team.

## A General Statement on How the New System Will Overcome the Problems Encountered and the Cost Benefit

The one major problem that TutorMe looks to address is the fact that all of these services are spread out and scattered. TutorMe integrates these services for the student in the hope that it will aid in their preparation and ultimately have positive effects on their grades. We take the social aspect of Facebook Events/Groups and apply it to their classes, allowing them to connect to classmates that might not necessarily be their friends on Facebook but would make great tutors or study partners.

The cost benefit of TutorMe is exemplified by the fact that there is no current system that provides the same integration of our services. Our system is unique, yet comprehensive, and is designed to be so.

## A Complete Collection of the Documents, Procedures and other Available Details Concerning the Operation/Content of the Current System

N.A

Both current systems of the Trinity Website and the Honor Code Website have no documentation on details or procedures. In fact we are inferring that this is what people would use in regards to learning about the Honor Code and other academic information as well as connecting with possible tutors.