Proposal

TutorMe

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1**Preface**

This is a proposal for the TutorMe project for partial fulfillment of the requirements of a Software Engineering course (CSC431) project in the department of Computer Science at the University of Miami.

This proposal provides the scope and context of the project to be undertaken. It details the intended user group and the value that the system will have to them.

The intended audience of this document is the course professor and teaching assistants so that they can determine whether the project should be approved as proposed, approved with modifications, or not approved.

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**1.0 Overview**

**1.1 Purpose, Scope and Objective**

Students have a hard time finding quality tutoring services on a moment's notice. For example, if a student has a paper due in a day, it may be hard to find a tutor to look over the paper and help with polishing it as most tutoring services are not open 24 hours. On top of that, tutoring services can be quite expensive.With the traditional standards of tutoring services, 24/7 access to tutors does not exist. Students who seek to find tutors at certain times outside of business hours and on a moment's notice will either pay a hefty price or not find a tutor with specialized knowledge and experience for the task at hand.

**1.2 Project Description**

TutorMe provides students requiring academic assistance with instantaneous access to qualified nearby tutors consisting of previous or current students who have taken the same curriculum. The application serves as a service that pools all the registered tutors nearby that are seeking to have sessions with students and displays their distance and credential to the students. Students then make a request for a session which is then sent to tutors who pertain to the chosen field of subject, to which the tutors choose whether to be available for the request. The available tutors are then propagated to the students' search and selected by them. “Fortunately, peer tutoring, in which students serve as tutors for other students, has been shown to have a positive impact on students of all ages.” (The University Network)

The front-end of the application will be written in **React Native**, an open-source UI software framework, enabling cross-compatibility for the mobile applications. The backend/database will be written in **Spring Boot (Java backend framework)** both storing user profile and their status information, and integrating third-party Google Maps API to enable the mapping functionality of the software.

The service will consist of two types of users. One which students can sign up for and request tutoring sessions. The other will allow anyone with sufficient qualifications to register and become a tutor through a screening process which will involve application, credentials, and testing.

Fundamentally, the purpose of the service is to:

* Provide instantaneous, reliable and affordable access to tutors nearby
* Provide qualified users a smooth, quick, and convenient process to make income tutoring

Main Function Walkthrough:

* TutorMe Students

1. Students are greeted with a map provided by the Google Maps API of all nearby tutors and live counter of tutors in their 15 mile radius

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1. Students request session and enter necessary info (Session can be for now or for the future
   1. Subject (subject field will be used to filter through available tutors and make session request viewable to those of that field)
   2. Topic - (course name, professor, semester/year taken)
   3. Academic Level
   4. Date & Time
   5. Location
      1. Students can request to meet virtually via Zoom, at a remote location, or sessions may be booked at their current location
      2. For location to be suitable, it must accommodate for
         1. Low levels of noises
         2. A work space
         3. Seating
         4. Internet access
   6. Description & Attachments
2. Search propagates with all nearby tutors that have successfully registered an account that are willing to book them a session
3. Student picks a tutor for the session
4. Transit of tutor shown on screen / future booking shown on “My Sessions”
5. Student confirms arrival of tutor

* TutorMe Tutors

1. Users interested in becoming a tutor go through a registration process requiring (but not limited to) proofs of course completion and satisfactory grades.
2. Once registered, tutors can activate search for nearby sessions of their field of study.
3. Searchpools pop up and tutors accept/decline to be part of searchpool.
4. Chosen tutor get Session confirmation
5. Transit begins to sessions
6. Confirm arrival

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