**Title**

Jace Baker

Gabriel Balanov

Danielle Faris

Lirit Fuksman

Evelyn Wong

**Abstract**

In our project,

**Table of Contents**

Executive Summary

Introduction

Discussion

Resources

Key Roles

Communication plan

Risk Analysis

Cost

**Executive summary**

**Introduction**

**Discussion**

**Resources**

Our main resources are the five team members and professor Lakshman Tamil who serves both as the sponsor for the project and the faculty supervisor. As a head of UTD Quality of Life Technology Laboratory, professor Tamil has provided his lab space as a weekly meeting room. His doctoral student Vignesh Kalidas whose research parallels the subject of the project is another point of contact and is valuable for providing EKG data samples and answering any technical questions. Since the existing AI model is located in the cloud which is accessible from personal laptops, it is expected that team members will work from their personal devices and no special access is needed.

Once EKG output from the model is obtained, it will be visualized using one of the software packages from PhysioNet website (**specify which one????**)

The web pages will be hosted using <https://autoecg.utdallas.edu>. Since the domain already exists and is used by the lab, there is no need to request a new server.

**Key roles**

Lirit Fuksman and Jace Baker will be working on transmitting the pre-processing the EKG data and feeding it to the AI model in the cloud. They will also be responsible for EKG signal visualization on the web page. Danielle Faris will be responsible for creating the database for storing recordings of EKG signals as well as will be working together with Lirit and Jace to send the output from the model back to the app. Danielle will also be responsible for creating two user roles with different website access privileges. Gabriel Balanov and Evelyn Wong will be responsible for the frontend of the project by creating an app which will transmit the EKG signal to the backend code as well as display notifications for the user.

Lirit Fuksman is the point of contact with the mentor as well as meeting organizer and meeting minutes taker.

**Communication plan**

Group members communicate via GroupMe chat because it allows for quick exchange of messages as well as file sharing if necessary. Moreover, Github repository was created for source control where each member can upload files and have access to the work of other team members. The interactions with sponsor (who is also the supervisor) happen via email and the weekly reports are verbal. The meetings with the sponsor occur every week on Mondays at 4:30pm while the team meetings are remote on Saturday evenings.

**Risk analysis**

Since our team has multiple people working both on backend and frontend sides, there are no anticipated delays in case of one of the team members getting sick or not being able to work for some time due to any reason. Thus, the schedule of deliverables should not be affected due to sickness. Moreover, since all the equipment needed is already owned by the lab, there are no delays with respect to shipment of any parts needed for the project. However, because visualization involves utilization of packages with little documentation and with which neither the supervisor nor his students have experience, there might be delays in not being able to figure out the visualization in time for the deliverable. In that case, the deadline could be extended as one of the backend team members can continue to work on visualization while the other team member can move forward with the next piece of the deliverable. Since the visualization is not tied to the app notification part of the project, issues with visualization will not delay the other part of the project. Moreover, since visualization is not the top priority, in a worst-case scenario the final implementation can be left to future developers.

**Costs**

There are no anticipated costs for the project as everything can be done on personal laptops and the spirometer device, the server and the test phone are already owned by the lab.

**Timetable+explanation**

**Phase 1**

**Phase 2**

**Phase 3**

**Evaluation+performance metrics**

**Contact Information+bio**

Lirit Fuksman

[Lxf1603230@utdallas.edu](mailto:Lxf1603230@utdallas.edu)

Short bio?

**Sources**