Project Biding for Wearable Posture Healthcare Monitoring System (P18)

Contents

Team outline 1

Relevant experience and expertise 2

Ideas of the project 2

Timeline 4

**Team Outline**

Living habits are highly correlated with health. As programmers, we need to sit for a long time every day to complete high-intensity work. This means good posture is closely related to our health. As a result, members of our group are all very interested in this project.

Health is closely related to everyone. As the pace of life accelerates, more and more social groups need good posture. Through this project, our team hopes to help more people and call for the social pays more attention to health. We will work hard to complete it

More similar applications focus on the relationship between exercise, diet and health. We have different perspectives. We believe that the app we develop will have great potential business value.

This project requires us to master and apply a variety of knowledge. At the same time, we have high-intensity work. For example, we have to gather data from various people, then analyze it to give out best sitting time and posture for each person. However, we enjoy this challenge. We will benefit a lot from the process of doing this project. This is also very helpful for our future development.

As advantages, members of our group have relevant project experience. Some of us have experience in developing phone application. Some of us have experience in applying sensor. Some of us do well in machine learning and collecting data. We believe that we will complete the project very well.

**Relevant experience and expertise**

For front-end and back-end, almost all of us fluency in html, CSS, JavaScript, php and MySQL. last year, we have finished a coursework about design a website which will work for a hotel to get the room ordered, which means we have experience about the front-end and back-end.

For the language, all members in our group are good at Java, C and C++.

Most members in this group have experience in develop ios/Android application.

Two group members have systematically studied algorithms and statistics.

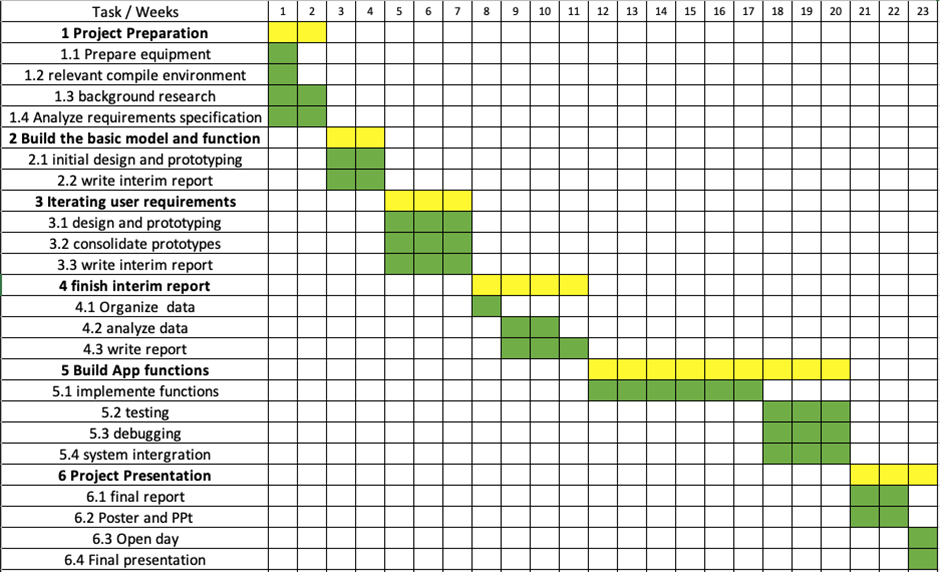
Some of members are also good at machine learning, which will be used to analyze the data to give the result of device.

**Ideas of the project**

For projects, we have some ideas which can be divided into the following aspects.

1. **Device**
2. The wearable devices are not necessarily limited to bracelets. Depending on the characteristics of the device, more styles of the wearable devices will be considered. A properly wearable device can accurately collect more data and give users a better experience.
3. Intelligent tables and chairs could be used, which adjust height, angle, etc. based on different test data.
4. Sensor could be used to collect user physical data.
5. Good devices will accurately provide data sets for the training model.
6. **APP**
7. Design and optimize the user interface to make it displays relevant data more intuitively and clearly
8. Voice prompts will be used to prompt the user to pose correctly
9. Real-time update the pictures of the comparison of correct posture and current posture and feedback to users.
10. **Backend**
11. Use machine learning to analyze the date collected from users
12. After analyzing the data, the result and relevant suggestions will be sent to the frontend

**Timeline**

****