

EKG Using Cloud Services

Project Plan

Team 3:

Bhargav Bobba

Jennifer Cox

Surya Indukuri

Promyse Ward

Introduction

- Electrocardiogram (ECG or EKG) - test used to detect cardiac problems
- Test results/data printed to paper or viewed on monitor
- Not efficient for nurses
- Goal: design EKG using cloud services system



Software Description



Team Member Roles

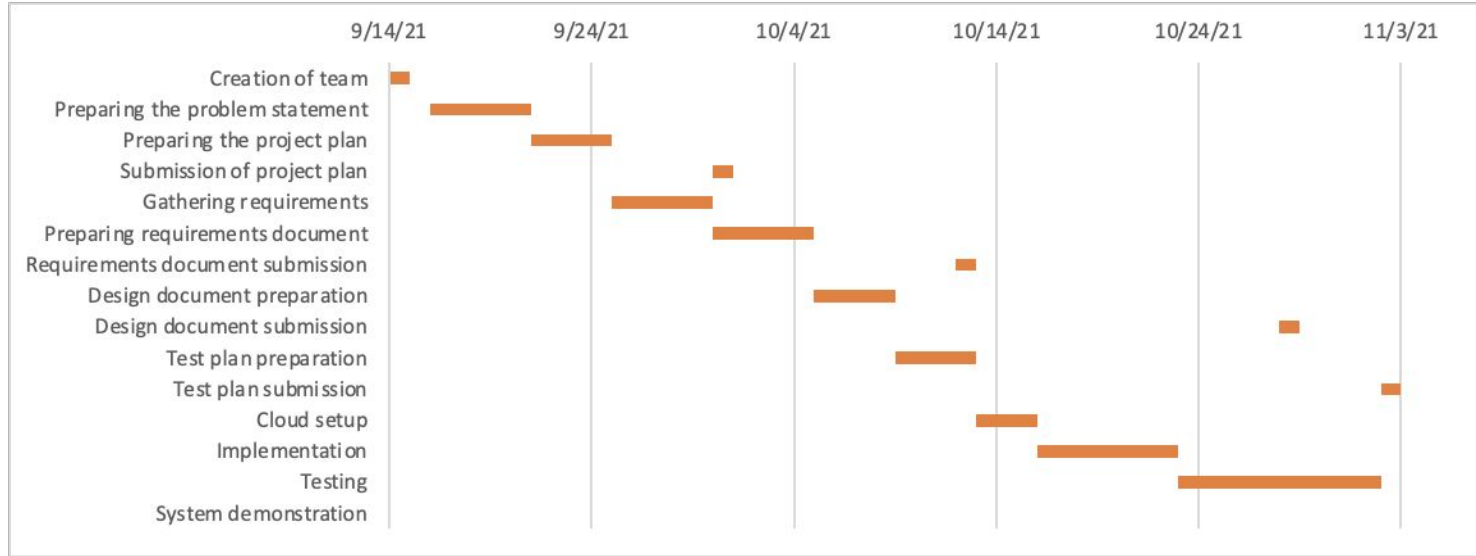
- Promyse - Project Manager
- Jennifer - System Analyst
- Bhargav - Quality Assurance Manager
- Surya - Test Analyst



Project Timeline

| Task Name | Start | End | Duration | Members Responsible |
|----------------------------------|----------|----------|----------|---------------------|
| Creation of team | 9/14/21 | 9/14/21 | 1 | Team |
| Preparing the problem statement | 9/16/21 | 9/21/21 | 5 | Team |
| Preparing the project plan | 9/21/21 | 9/25/21 | 4 | Team |
| Submission of project plan | 9/30/21 | 9/30/21 | 1 | Team |
| Gathering requirements | 9/25/21 | 9/30/21 | 5 | Jennifer & Promyse |
| Preparing requirements document | 9/30/21 | 10/5/21 | 5 | Jennifer & Promyse |
| Requirements document submission | 10/12/21 | 10/12/21 | 1 | Jennifer & Promyse |
| Design document preparation | 10/5/21 | 10/9/21 | 4 | Team |
| Design document submission | 10/28/21 | 10/28/21 | 1 | Team |
| Test plan preparation | 10/9/21 | 10/13/21 | 4 | Surya & Bhargav |
| Test plan submission | 11/2/21 | 11/2/21 | 1 | Surya & Bhargav |
| Cloud setup | 10/13/21 | 10/16/21 | 3 | Surya & Bhargav |
| Implementation | 10/16/21 | 10/23/21 | 7 | Team |
| Testing | 10/23/21 | 11/2/21 | 10 | Team |
| System demonstration | 11/4/21 | 11/4/21 | 1 | Team |

Project Timeline



Potential Difficulties

- Integration of heterogeneous data sources
- HIPAA standards for privacy
- Large amounts of data for continuous monitoring
 - Delayed processing
 - Identification of relevant data
- Visualization of lengthy time-series data



Resources

Human Resources:

- Team Members
- Outsourcing:
 - Programmer/Developer
 - Cloud Engineer
 - Web Developer

Hardware:

- EKG Machine

AWS Cloud Resources:

- S3 Simple Storage
- Relational Database Service (RDS)
- Lambda
- EC2 Instance

