Visualizing and Predicting Heart Diseases with an Interactive Dash Board

Team ID: PNT2022TMID48269

Faculty Mentor: Team Leader: R.Sundaresan

M.Divya Team Member : R.Gowsalya

Team Member : A.Lavanya

Team Member: A.Thavaselvam

Team Member: S. Vaishali

Project Planning Phase Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Product Backlog, Sprint Schedule, and Estimation

Use the below template to create product backlog and sprint schedule

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------------|----------------------|---|--------------|----------|-----------------|
| Sprint-1 | Registration | USN-1 | As a user, I can register for the application by entering my email, password, and confirming my password. | 2 | High | 1 |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | 2 |
| Sprint-2 | | USN-3 | As a user, I can register for the application through Facebook | 2 | Low | 4 |
| Sprint-1 | | USN-4 | As a user, I can register for the application through Gmail | 2 | Medium | 3 |
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | 2 |
| Sprint-2 | Dashboard | USN-6 | Profile - view & update your profile | 2 | High | 5 |
| Sprint-1 | | USN-7 | Change Password - user can change the password | 1 | High | 2 |
| Sprint-1 | | USN-8 | Home - Analyze your Heart | 2 | High | 5 |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members | |
|----------|-------------------------------------|----------------------|--|---------------------|----------|-----------------|--|
| Sprint-3 | Sprint-3 USN-9 I | | The user will have to fill in the below 13 fields for the system to predict a disease -Age in Year -Gender -Chest Pain Type -Fasting Blood Sugar -Resting Electrographic Results(Restecg) -Exercise Induced Angina(Exang) -The slope of the peak exercise ST segment -CA – Number of major vessels colored by fluoroscopy -Thal -Trest Blood Pressure -Serum Cholesterol -Maximum heart rate achieved(Thalach) -ST depression induced by exercise(Oldpeak) | 2 | High | 5 | |
| | | USN-10 | View Doctors - view doctor detail by searching by names or filter by specialty | 1 | Medium | 4 | |
| Sprint-3 | System Requirment | USN-11 | I. Hardware Requirementi. Laptop or PCI5 processor system or higher | 2 | High | 2 | |

| Sprint Functional User Story Requirement (Epic) | | User Story / Task | Story Points | Priority | Team Members | |
|---|--------------------------|-------------------|---------------------------------------|----------|-----------------|---|
| | | | • 4 GB RAM or higher | | | |
| | | | • 128 GB ROM or higher | | | |
| | | | ii. Android Phone (12.0 and above) | | | |
| Sprint-3 | | USN-12 | II. Software Requirement | 2 | Medium | 2 |
| | | | iii. Laptop or PC | | | |
| | | | • Windows 10 or higher | | | |
| | | | Android Studio | | | |
| Sprint-4 | Dashboard USN-13 Query 1 | 1 | High | 1 | | |
| | | USN-14 | Toll Free | 1 | High | 1 |
| | | USN-15 | Ratings | 2 | Medium | 2 |
| | | USN-16 | Verification | 2 | High | 2 |
| | | USN-17 | Validation | 1 | High | 2 |
| | | USN-18 | Feedback – send feedback to the Admin | 2 | Medium | 3 |

Project Tracker, Velocity

| Sprint | Total Story | Duration | Sprint Start Date | Sprint End Date | Story Points Sprint Release Date | |
|----------|-------------|----------|-------------------|-----------------|----------------------------------|-------------|
| | Points | | | (Planned) | Completed (as on | (Actual) |
| | | | | | Planned End | |
| | • | (5 | 212 | 20.0 | Date) | |
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 18 | 06 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 11 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 19 | 19 Nov 2022 |

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Reference:

https://ieeexplore.ieee.org/document/9619208/