**Project Planning Phase**

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

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| --- | --- |
| Date | 18 October 2022 |
| Team ID | PNT2022TMID12524 |
| Project Name | Deep Learning Fundus Image Analysis For Early Detection Of Diabetic Retinopathy. |
| Maximum Marks | 8 Marks |

**Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

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 | Data Collection | Task-1 | In Deep Learning Model, It can be spilt into Testing and Training set. | 4 | Medium | M. Keerthna  Chiraj Gupta |
| Sprint-1 | Data Pre-processing | Task-2 | Import the required data for pre-processing.  Application of the image data generator to the train and test set. | 7 | Low | Varun Bhardwaj  Johanna Smriti  Chirag Gupta |
| Sprint-1 | Build Homepage | USN-1 | Homepage give the brief description to the user. | 4 | Medium | Johanna Smriti  Varun Bhardwaj |
| Sprint-2 | Create Registration page | USN-2 | In this page, User will able to register for the application. | 2 | Low | M. Keerthna  Johanna Srmiti |
| Sprint-2 | Train,Save,Test | Task-3 | To train the model with the configured neural network and save the model. Test the build model against the testing dataset. | 3 | High | M. Keerthna  Chirag Gupta |
| Sprint-3 | Create Service Instance | Task-4 | Configure the location of resource such as web server and cloud storage for an application. | 7 | High | Varun Bhardwaj  Johanna Smriti  Chirag Gupta |
| Sprint-3 | Creating Database | Task-5 | IBM Cloud, offered the required credentials to access the services and the database accessed by the users. | 6 | High | Varun Bhardwaj  M. Keerthna |
| Sprint-3 | Creating Tables in Database | Task-6 | Structure the required tables with necessary attributes in cloud DB. | 4 | Medium | Chiraj Gupta  Johanna Smriti |

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| --- | --- | --- | --- | --- | --- | --- |
| Sprint-4 | Building login page | USN-3 | User will be able to login by using the credentials. | 3 | Low | M. Keerthna  Johanna Srmiti |
| Sprint-4 | Create Image uploading page | Task-7 | Upload the test image | 2 | Low | Varun Bharadwaj  Chirag Gupta |
| Sprint-4 | Building Prediction page | USN-4 | User able to receive the diagnosis on their diabetic retinopathy. | 2 | Medium | M. Keerthna  Johanna Srmiti |
| Sprint-4 | Building logout page | USN-5 | User will be able to logout their account in this  Page. | 2 | Medium | Varun Bharadwaj  Chirag Gupta |
| Sprint-4 | Build Python code | Task-8 | The Necessary modules should be initialize and the libraries should be imported. | 1 | Medium | M. Keerthna  Johanna Srmiti |
| Sprint-4 |  | Task-9 | Use the database using initiating client and rendering HTML page. | 2 | Medium | Varun Bharadwaj  Chirag Gupta |
| Sprint-4 |  | Task-10 | Configuring the registration, login pages and evaluating the credentials. | 2 | Medium | Johanna Smriti  Varun Bhardwaj |
| Sprint-4 |  | Task-11 | The model prediction will be showcased on UI. | 1 | High | M. Keerthna  Johanna Smriti  Chirag Gupta |
| Sprint-4 | Run the Application | Task-12 | Run to check the application. | 2 | High | Varun Bharadwaj  Chirag Gupta |
| Sprint-4 |  | Task-13 | Upload image in the homepage to predict the diabetic retinopathy. | 5 | High | M. Keerthna  Johanna Srmiti |
| Sprint-4 | Train model on IBM | Task-14 | Train the model on IBM and integrate it with the flask application. | 3 | High | M. Keerthna  Johanna Smriti  Chirag Gupta  Varun Bharadwaj |

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

| **Sprint** | **Total Story Points** | **Duration** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed (as on Planned End Date)** | **Sprint Release Date (Actual)** |
| --- | --- | --- | --- | --- | --- | --- |
| 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 | 20 | 5 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 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)



**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile[software development](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). However, burn down charts can be applied to any project containing measurable progress over time.

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