Project Planning Phase

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

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID52366 |
| Project Name | Deep learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy |
| Maximum Marks | 4 Marks |

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

Use the below template to create product backlog and sprint schedule

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| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-1 | Data collection | Task-1 | To build a Deep learning Model which begins with the process of splitting data into training  and testing set. | 4 | Medium | Maragatham  Anitha  Jaya priya  Kowsalya |
| Sprint-1 | Data preprocessing | Task-2 | We import the required libraries for preprocessing. We instantiate the Image Data Generator class to configure and augment different types of image data. | 5 | Low | Maragtham  Anitha  Kowsalya  Jaya priya |
| Sprint-1 | Data Preprocessing | Task-3 | Application of the Image Data Generator to the Train and Test Set. | 7 | Medium | Maragatham  Anitha  Kowsalya |
| Sprint-1 | Building Homepage | USN-1 | As a user, They will be given a brief description in the homepage. | 4 | Low | Maragatham  Kowsalya |
| Sprint-2 | Feature Extraction | Task-4 | Build a CNN Model and only use it as a feature  extraction by freezing the convolution blocks. | 8 | High | Maragatham  Kowsalya |
| Sprint-2 | Building the layers | Task-5 | Adding of dense layers with the aid of Keras. Addition of Optimizer, choosing loss function  and the Metrics. | 7 | High | Maragatham  Anitha  Kowsalya  Jaya priya |
| Sprint-2 | Train, Save,Test | Task-6 | To train the model with the configured neural network and save the model. Test the built model against the testing dataset. | 3 | High | Maragatham  Kowsalya |
| Sprint-2 | Building Registration  Page | USN-2 | As a user, she will be able to register for the  application. | 2 | Low | Maragatham  Kowsalya |

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| **Sprint** | **Functional**  **Requirement (Epic)** | **User Story**  **Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-3 | Create Service Instance | Task-7 | Configure the location of resources, such as web server, and Cloud Storage for an application | 7 | High | Maragatham  Anitha  Kowsalya |
| Sprint-3 | Configuring credentials and  creating DB | Task-8 | Define the credentials that are required to access the services offered by IBM Cloudant  and add users to access the DB. | 6 | High | Maragatham  Jaya priya |
| Sprint-3 | Create Tables in DB | Task-9 | Structure the required tables with necessary attributes in Cloudant DB. | 4 | Medium | Maragatham |
| Sprint-3 | Building Login Page | USN-3 | As a user, she will be able to login using her credentials. | 3 | Low | Maragatham  Anitha  Kowsalya |
| Sprint-4 | Building prediction  page | USN-4 | As a user, she will be able to receive the  diagnosis on her diabetic retinopathy. | 2 | Medium | Maragatham  Kowsalya |
| Sprint-4 | Building Logout Page | USN-5 | As a user, she will be able to logout of her account in this page. | 2 | Medium | Maragatham  Anitha |
| Sprint-4 | Build python code | Task-9 | Import the libraries and Initialise the necessary  modules | 1 | Medium | Maragatham  Kowsalya |
| Sprint-4 |  | Task-10 | Use the database using initiated client and rendering HTML pages | 2 | Medium | Maragatham |
| Sprint-4 |  | Task-11 | Configuring the registration, login pages and  validating the credentials. | 2 | Medium | Maragatham  Kowsalya |
| Sprint-4 |  | Task-12 | Showcasing the model’s prediction on UI. | 1 | High | Maragatham  Kowsalya |
| Sprint-4 | Run the application. | Task-13 | Run the application in the anaconda prompt to  check the application. | 2 | High | Maragatham |
| Sprint-4 |  | Task-14 | In the homepage, after logging on using credentials, upload the image to predict the diagnosis on diabetic retinopathy. | 5 | High | Maragatham  Anitha  Jaya priya |
| Sprint-4 | Train Model On IBM | Task-15 | train the model on IBM and integrate it with the  flask Application. | 3 | High | Maragatham  Kowsalya  Jaya priya |