**Initial Project Planning Template**

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| Date | 15 October 2024 |
| Team ID | 739972 |
| Project Name | OptiInsight - Revolutionizing Ophthalmic Care With Deep Learning For Predictive Eye Disease Analysis |
| Maximum Marks | 4 Marks |
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| **User Story / Task** | **Functional Requirement (Epic)** | **User Story Number** |  | **Story Points** | **Priority** | **Team Members** | **Sprint Start Date** | **Sprint End Date (Planned)** |
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| Sprint-1 | Initial Model Development | USN-1 | The initial model development for Optiinsight focuses on building a deep learning-based system for early detection of eye diseases like diabetic retinopathy and glaucoma using ophthalmic images | 2 | High | MA RASHEED KHALID,  MD SUBHAN. | 24/10/2024 | 28/10/2024 |
| Sprint-1 | Model Training | USN-2 | The model training process for Optiinsight involves feeding preprocessed ophthalmic image data into the Convolutional Neural Network (CNN). The dataset is split into training, validation, and testing sets to ensure balanced evaluation. Using a transfer learning approach with pre-trained models like ResNet or VGG16, the network learns to extract critical features from images. | 1 | High | MA RASHEED KHALID,  SANGA RAKESH. | 29/10/2024 | 01/11/2024 |
| Sprint-2 | Model Evaluation and Deployment | USN-3 | The trained model for Optiinsight is evaluated using performance metrics such as accuracy, precision, recall, F1-score, and confusion matrix to ensure reliable detection of eye diseases like diabetic retinopathy and glaucoma. The model is tested on unseen data to validate its generalization capability and identify any false positives or negatives. | 2 | Low | MA RASHEED KHALID,  M RITHVIK KUMAR. | 02/11/2024 | 09/11/2024 |
| Sprint-1 | Model Deployment | USN-4 | The deployment of the Optiinsight model involves integrating the trained deep learning system into a real-world application, allowing healthcare professionals to access it for early detection of eye diseases. This can be achieved through cloud deployment on platforms like AWS or Azure, ensuring scalability and easy accessibility. | 2 | Medium | MA RASHEED KHALID,  M RITHVIK KUMAR,  SANGA RAKESH. | 10/11/2024 | 12/11/2024 |
| Sprint-1 | Explanation | USN-5 | The deployment of the **Optiinsight** model is designed to bring advanced eye disease detection directly into clinical settings, improving diagnostic accuracy and efficiency. By deploying the model on cloud platforms like AWS or Google Cloud, it ensures that the system can scale easily, making it accessible to healthcare professionals across various locations. For areas with limited internet access, edge deployment on devices such as Raspberry Pi provides a reliable alternative for real-time analysis. The model's integration into existing healthcare systems, such as hospital information systems and electronic health records, allows it to interact seamlessly with imaging devices, simplifying the workflow for doctors. | 2 | High | MA RASHEED KHALID,  M RITHVIK KUMAR,  MD SUBHAN. | 13/11/2024 | 15/11/2024 |

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