

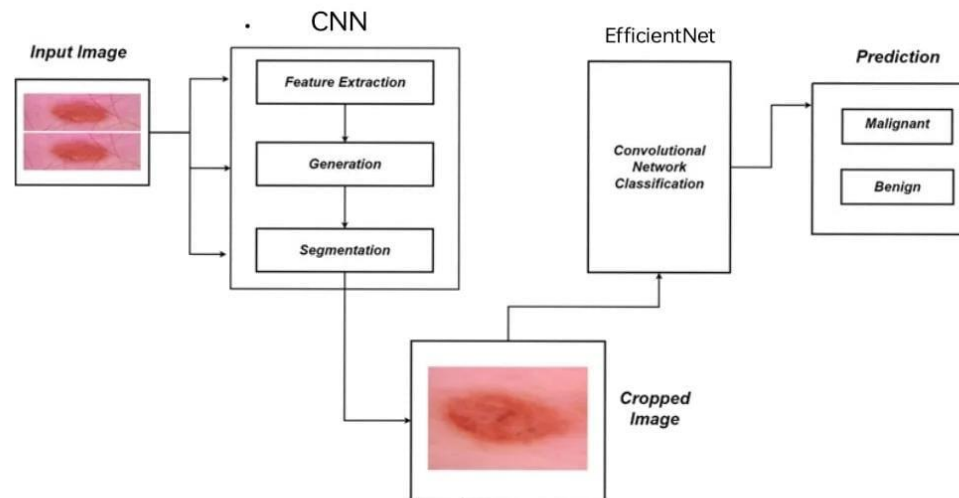
Project Design Phase-II

Data Flow Diagram & User Stories

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| Date | 2 November 2023 |
| Team ID | Team-592277 |
| Project Name | End-To-End Deep Learning Project For Detecting Melanoma Diseases |
| Maximum Marks | 4 Marks |

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



User Stories

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Release |
|-----------------------------------|--------------------------------|-------------------|---|---|----------|----------|
| Healthcare | Project setup & Infrastructure | USN-1 | Set up the development environment with the required tools, frameworks and libraries to start the detection or predicting Alzheimer's disease | completed setting all necessary tools, frameworks and libraries | High | Sprint-1 |
| Researchers | Developing environment | USN-2 | Gather a diverse dataset of lesions in different parts of the body for training the Deep learning model | Gathered a diverse dataset of images depicting various stages of disease | High | Sprint-1 |
| Public Health Officials | Feature extraction | USN-3 | Feature extraction involves automatically identifying and selecting significant patterns or attributes from raw data, enabling models to focus on prediction. | We could remove the unwanted from the dataset and focus on the patterns | High | Sprint-2 |
| Educational Institutions | Data preprocessing | USN-4 | Evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for predicting | Discovering various deep learning algorithms and focusing on the best one | High | Sprint-2 |
| Different Company's | Model development | USN-5 | Train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set. | To increase the models performance | High | Sprint-3 |
| Specific Hospitals (Beta testing) | Training | USN-6 | Train the selected deep learning model using the preprocessed dataset and monitor its performance under doctors and other trained professionals | To train the model to the max | High | Sprint-4 |
| Specific Hospitals (Beta testing) | Prediction | USN-7 | When the particular image scan is inserted into the model it will classify it with the pre-trained model and predict the stage of cancer | To get the best prediction | Medium | Sprint-4 |
| General Public | Model deployment | USN-8 | Deploy the trained deep learning model as an web service which can be accesd by genral public to check whether they have Melanoma | Acceptance of the public | Medium | Sprint-5 |