

Project Design Phase-I
Solution Architecture

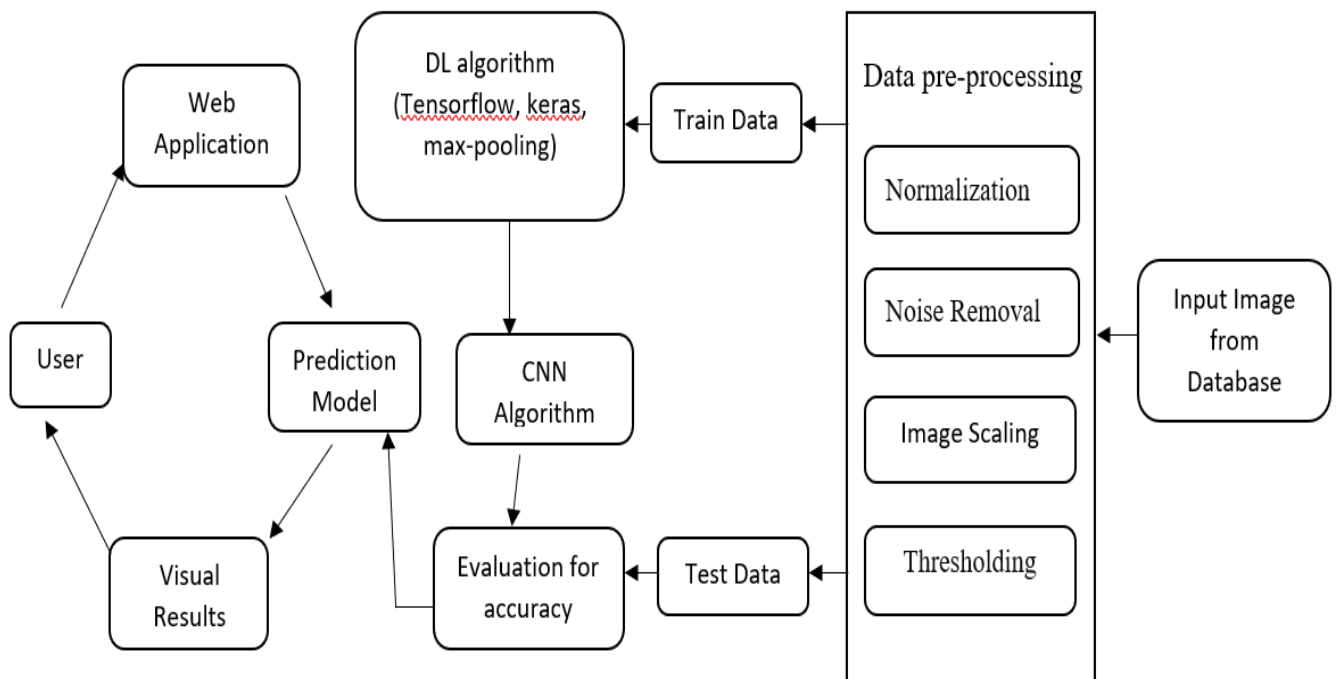
Date	19 September 2022
Team ID	PNT2022TMID04852
Project Name	Classification of arrhythmia by using deep learning with 2-d ECG spectral image representation
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

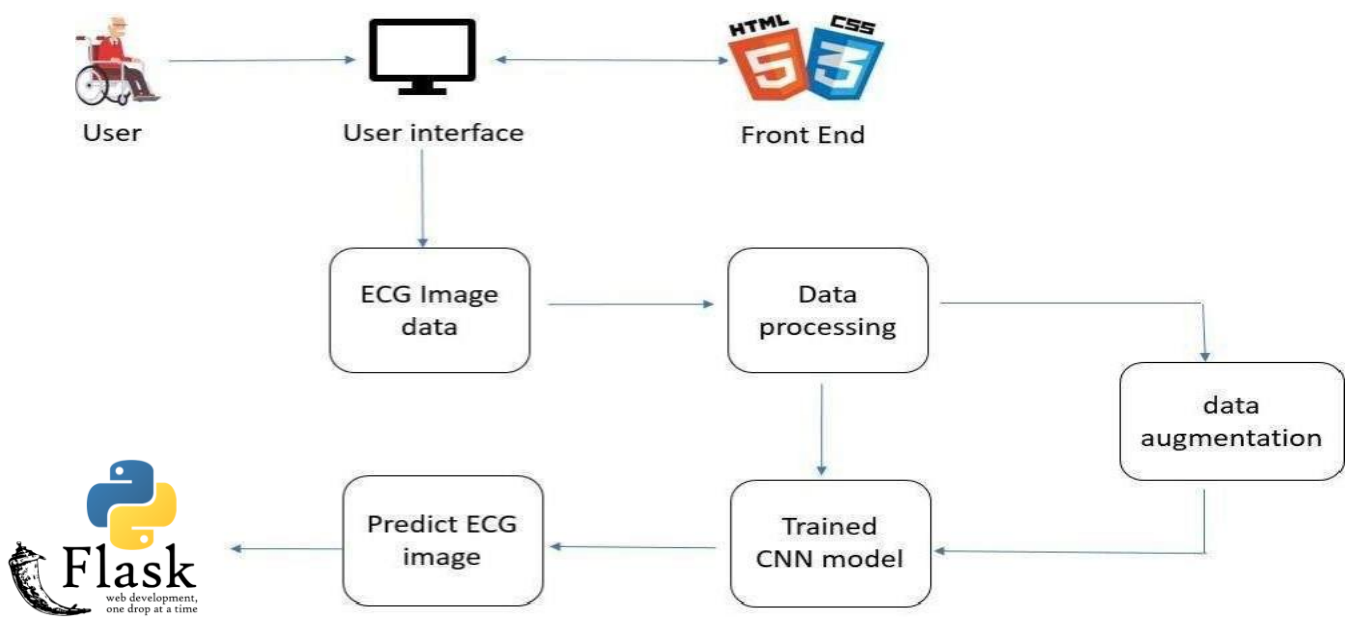
Architecture:



Technologies needed for Minimum Viable Product deployment

- Working with HTML & CSS for frontend
- Working with image processing technique to process the image dataset
- Working with CNN architecture for train the model
- Working with Tensorflow package
- Working with Keras package
- Build a web application using the Flask framework

Classification of Arrhythmia:



Platform

- Git & GitHub - Project Management
- IBM Cloud - Hosting
- IBM Watson - Training the Deep Learning Mode