VSB ENGINEERING COLLEGE

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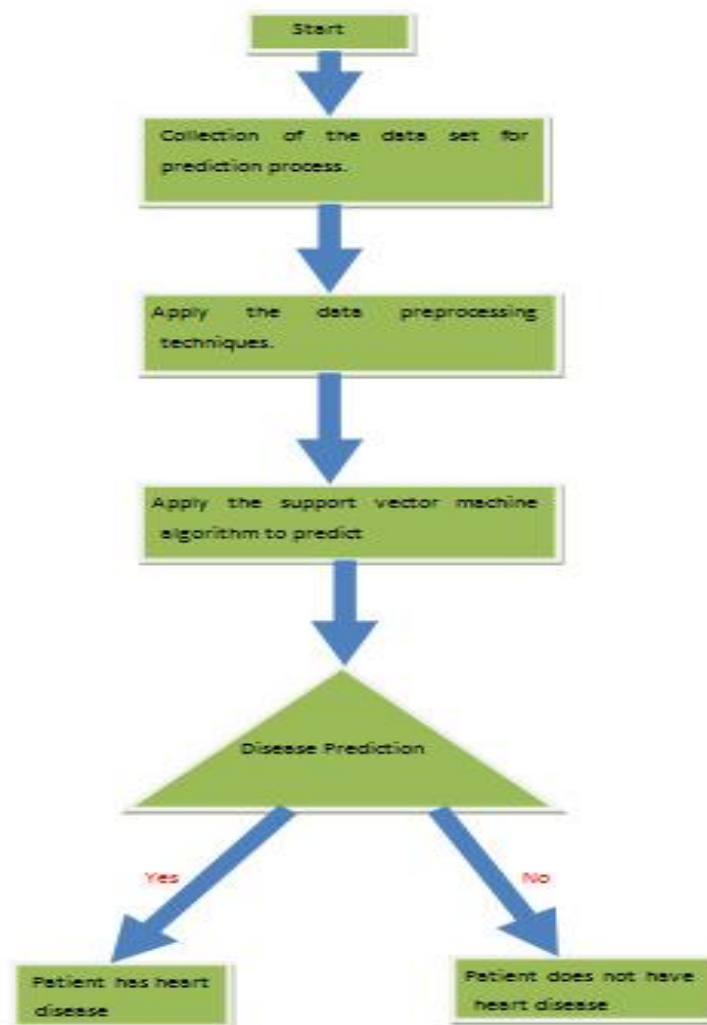
Date	19 October 2022
Team ID	PNT2022TMID33466
TOPIC	Visualizing and Predicting Heart Diseases with Interactive Dash Board
Domain	Data Analytics
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Data flow Diagram:

   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.

Data Flows:

   * In starting stage we have to collect the datas and we need to set for the prediction process.
   *After that we have to apply the data preprocessing techniques.
   *Along with that we need to apply the support vector machine algorithm to predict heart disease with the interactive dashboard.
   *If there is a disease prediction the patient will have the heart disease. Otherwise they dont affected by the heart diseases.

```
                    ┌─────────────┐
                    │    Start    │
                    └─────────────┘
                           │
                           ▼
            ┌──────────────────────────────┐
            │ Collection of the data set for│
            │ prediction process.           │
            └──────────────────────────────┘
                           │
                           ▼
            ┌──────────────────────────────┐
            │ Apply the data preprocessing  │
            │ techniques.                   │
            └──────────────────────────────┘
                           │
                           ▼
            ┌──────────────────────────────┐
            │ Apply the support vector machine│
            │ algorithm to predict          │
            └──────────────────────────────┘
                           │
                           ▼
                  Disease Prediction
              Yes                      No
               ▼                        ▼
    ┌──────────────────┐    ┌──────────────────────┐
    │ Patient has heart│    │ Patient does not have │
    │ disease          │    │ heart disease         │
    └──────────────────┘    └──────────────────────┘
```

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail	I can register & access the dashboard with Gmail Login	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password	I can register & access the dashboard with Gmail Login	High	Sprint-1
	DashBoard	USN-6	Profile - view & update your profile	I can see the profile.	Medium	Sprint-2
		USN-7	Change Password - user can change the password	I can able to change the password	High	Sprint-1
		USN-8	Home - Analyze your Heart	I can detect the health condition from where ever I want.	High	Sprint-1

		USN-9	The user will have to fill in the below 13 fields for the system to predict a disease -Age in Year - Gender -Chest Pain Type -Fasting Blood Sugar - Resting Electrographic Results(Restecg) -Exercise Induced Angina(Exang) -The slope of the peak exercise ST segment -CA – Number of major vessels colored by fluoroscopy -Thal -Trest Blood Pressure -Serum Cholesterol -Maximum heart rate achieved(Thalach) -ST depression induced by exercise(Oldpeak)	These are the categories available in that application.	High	Sprint-2
Customer Care Executive	Dashboard	USN-10	Query	You can post your queries in the text box available in that application.	High	Sprint-1
Administrator	DashBoard	USN-11	Verification	Verification through CAPTCHA Verification through I'm not a robot	High	Sprint-1