# Capstone Project for XT FSD

- · Each participant will be given an individual FullStack project
- · Participant will have 2 weeks to meet the evaluation criteria of the projects
- All repositories must be created as private projects on https://gitlab-sapient.stackroute.in

#### **Evaluation Criteria**

Submissions will be evaluated based on the demonstration of following technologies and skills:

- ExpressIS
  - REST API Design and Implementation
  - · Ability to authenticate and use standalone APIs
  - Swagger Documentation (openapi v3)
- PassportJS
  - Gitlab / Google Authentication
  - Scalable Authentication
- MongoDB
  - Schema Design
  - (UI --> Datastore) Impedance Mismatch
    - Structural and Integrity Mismatch
    - Manipulative differences
- Socket.io
  - Namespace and Rooms Design and Usage
  - Message Format
- Redux
  - State, Action design
  - Saga design
- React+Typescript
  - Component Design (Thinking in React)
  - Performance Optimization
  - Lazy Loading Components
  - CSS Best Practices
- CI / CD
  - Unit Testing ExpressJS, Redux, Redux Saga, ReactJS Components
  - Test Coverage
  - Negative Test Scenarios
- Performance and Accessibility
  - · Time to first load
  - Bundle Size

## Schedule

## 13 Feb

Participants are assigned one out of the four capstone projects

 Project Problem Statements and Orientation Slots for 14-Feb will be communicated via email and slack

#### 14 Feb

- 9.00 9.30 Problem Statement 1
- 9.45 10.15 Problem Statement 2
- 10.30 11.00 Problem Statement 3
- 11.15 11.45 Problem Statement 4

## 15 Feb - Design Submissions

Participants should complete the following items and submit their design.

- 1. API Swagger Documentation
- 2. Mongoose Schema
- 3. ReactJS Static Components
- 4. Redux Store Design
  - types
    - including sagas
  - actions
- 5. docker-compose.yml

#### 18 Feb

• Best design in each group will be selected and announced by the mentors by EoD

## 19-Feb (S) Design Checkpoint

- Participants with best design in each group will present their design to the rest of the group.
- Each participant will have 15 mins

## 22-Feb Implementation and Deployment Submission

26-Feb (S) Implementation and Deployment Checkpoint