**Tasks and Subtasks:**

1. Identification of project
2. Planning of project and need analysis
   1. Planning
   2. Scope plan
3. Study
   1. NLP
   2. Image Analysis
   3. Raspberry Pi
4. Designing of various diagrams
   1. Use-case diagram
   2. Activity diagram
   3. Work Breakdown Structure
5. Hardware interfacing
   1. Setup of Raspberry Pi 3
      1. Setup sensors
         1. Camera
         2. Mic
      2. Setup Actuators
         1. Speaker
      3. Validating interfacing
6. Software interfacing
   1. Setup Module
      1. Create GUI (using Python – Tkinter library)
      2. Create Different modules for Viva/Interview and Quiz setup
   2. Viva/Interview Module
      1. Viva/Int erview Generator
         1. Question Bank Creation
         2. Question Selector based on difficulty
      2. Viva/Interviewing process module
         1. Text-to-speech module (for asking questions)
         2. Speech-to-text module (for registering response)
         3. Storage module
      3. Viva/Interview Processor
         1. Text-summarization module (using NLP)
         2. Keyword Extractor
         3. Grade Analyzer
         4. Spreadsheet Creator
   3. Quiz Module
      1. Quiz Generator
         1. Question Bank Creation
         2. Question Selector based on difficulty
      2. Quiz Analyzer
         1. Image Capturing module (using object recognition)
         2. Roll no./Candidate ID detection module (using ODR)
         3. Blue Tick Detection module (using Image analysis)
         4. Marking module
         5. Spreadsheet Creator

1. Integration
   1. Software and Hardware integration
   2. Module integration
2. Testing
   1. Unit testing
   2. Module testing
   3. System testing
   4. Acceptance testing
3. Deployment
   1. Beta testing
   2. Modifications
4. Evaluations