Interactive Conversational Agent

1. Planning
- 1.1. Conduct kickoff meeting
  - 1.1.1. Review team roles
  - 1.1.2. Discuss plans
  - 1.1.3. Review meeting
- 1.2. Concept exploration
  - 1.2.1. Create proposal
  - 1.2.2. Identify needs
- 1.3. Project scheduling
  - 1.3.1. Tasks allocation
- 1.4. Plan organize
- 1.5. Define SW running environment

2. Requirements Analysis
- 2.1. Review assignment outline
- 2.2. User meeting
  - 2.2.1. Prepare questions
  - 2.2.2. Conduct meeting
  - 2.2.3. Review meeting
- 2.3. Analyze functions
- 2.4. Define and develop preliminary SW requirements
  - 2.4.1. Create draft SW requirements
  - 2.4.2. Update draft SW requirements
  - 2.4.3. Review final SW requirements
- 2.5. Define scope statement

3. Design
- 3.1. Process status meeting
  - 3.1.1. Staff allocation
  - 3.1.2. Scheduling
- 3.2. Identify scenario
  - 3.2.1. Choose a topic
  - 3.2.2. Choose a role
  - 3.2.3. Design conversations
- 3.3. Choose a language for coding
  - 3.3.1. Choose a language for interfaces
  - 3.3.2. Choose a language for database
- 3.4. Database design
  - 3.4.1. Design preliminary database model
  - 3.4.2. Create a diagram
- 3.5. Algorithm design
  - 3.5.1. Design pattern matching algorithms
  - 3.5.2. Choose data structures
- 3.6. Interfaces design
- 3.7. Software prototyping

4. Development and Coding
- 4.1. Develop a database
  - 4.1.1. Add output sentences
  - 4.1.2. Classify output sentences
- 4.2. Develop algorithms
- 4.3. Develop a user interface
  - 4.3.1. Code front-end screens
  - 4.3.2. Add comments
  - 4.3.3. Integrate with database
  - 4.3.4. Algorithms implementation
- 4.4. Debugging

5. Testing
- 5.1. Install the SW
- 5.2. Create test code
- 5.3. Software testing
  - 5.3.1. Unit testing
  - 5.3.2. Coverage testing
- 5.4. Integration testing
  - 5.4.1. Create test cases
  - 5.4.2. Collect test results
- 5.5. Performance testing

6. Deployment
- 6.1. Deployed SW
- 6.2. Upload SW to repository
- 6.3. Create README file
  - 6.3.1. Explain the project
  - 6.3.2. Describe classes
- 6.4. Retrieve outputs