**Location-based Facebook Chatbot**

Table of Contents

[A. Introduction 5](#_Toc492630850)

[1. Project information 5](#_Toc492630851)

[2. Introduction 5](#_Toc492630852)

[3. Current situation 5](#_Toc492630853)

[4. Problem definition 5](#_Toc492630854)

[5. Proposed solution 5](#_Toc492630855)

[5.1. Feature functions 5](#_Toc492630856)

[5.2. Advantages 5](#_Toc492630857)

[5.3. Disadvantages 5](#_Toc492630858)

[6. Functional Requirements 5](#_Toc492630859)

[7. Roles and Responsibilities 5](#_Toc492630860)

[B. Software Project Management Plan 5](#_Toc492630861)

[1. Problem definition 5](#_Toc492630862)

[1.1. Name of this project 5](#_Toc492630863)

[1.2. Problem abstract 5](#_Toc492630864)

[1.3. Project overview 5](#_Toc492630865)

[1.3.1. Current situation 5](#_Toc492630866)

[1.3.2. The proposed system 5](#_Toc492630867)

[1.3.3. Boundaries of the system 5](#_Toc492630868)

[1.3.4. Future plans 5](#_Toc492630869)

[1.3.5. Development environment 5](#_Toc492630870)

[1.3.5.1. Hardware requirement 5](#_Toc492630871)

[1.3.5.2. Software requirement 5](#_Toc492630872)

[2. Project organization 5](#_Toc492630873)

[2.1. Software process model 5](#_Toc492630874)

[2.2. Roles and responsibilities 5](#_Toc492630875)

[2.3. Tools and techniques 5](#_Toc492630876)

[2.4. Dependencies 5](#_Toc492630877)

[3. Project Management plan 5](#_Toc492630878)

[3.1. Tasks 5](#_Toc492630879)

[3.1.1. Initializing 5](#_Toc492630880)

[3.1.2. Planning 5](#_Toc492630881)

[3.1.3. Specifying requirements 5](#_Toc492630882)

[3.1.4. Designing database 5](#_Toc492630883)

[3.1.5. Create software design documents 5](#_Toc492630884)

[3.1.6. Implementing 5](#_Toc492630885)

[3.1.7. Testing 5](#_Toc492630886)

[3.1.8. Creating user’s manual 5](#_Toc492630887)

[3.2. Tasks sheet 5](#_Toc492630888)

[3.3. All meeting minutes 5](#_Toc492630889)

[4. Coding convention 5](#_Toc492630890)

[C. Software Requirement Specification 5](#_Toc492630891)

[1. User requirement specification 6](#_Toc492630892)

[1.1. Guest requirement 6](#_Toc492630893)

[1.2. User requirement 6](#_Toc492630894)

[1.3. Administrator requirement 6](#_Toc492630895)

[2. System requirement specification 6](#_Toc492630896)

[2.1. External interface requirement 6](#_Toc492630897)

[2.1.1. User interface 6](#_Toc492630898)

[2.1.2. Hardware interface 6](#_Toc492630899)

[2.1.3. Software interface 6](#_Toc492630900)

[2.1.4. Communication protocol 6](#_Toc492630901)

[2.2. System overview use case 6](#_Toc492630902)

[2.3. Use cases 6](#_Toc492630903)

[3. Software system attribute 6](#_Toc492630904)

[3.1. Usability 6](#_Toc492630905)

[3.1.1. Graphic user interface 6](#_Toc492630906)

[3.1.2. Usability 6](#_Toc492630907)

[3.1.3. Installation 6](#_Toc492630908)

[3.2. Reliability 6](#_Toc492630909)

[3.3. Availability 6](#_Toc492630910)

[3.4. Security 6](#_Toc492630911)

[3.5. Maintainability 6](#_Toc492630912)

[3.6. Portability 6](#_Toc492630913)

[3.7. Performance 6](#_Toc492630914)

[4. Conceptual program 6](#_Toc492630915)

[D. Software Design Description 6](#_Toc492630916)

[1. Design overview 6](#_Toc492630917)

[2. System architecture design 6](#_Toc492630918)

[2.1. Web application architecture description 6](#_Toc492630919)

[3. Component diagram 6](#_Toc492630920)

[4. Detailed description 6](#_Toc492630921)

[4.1. Class diagram 6](#_Toc492630922)

[4.2. Class diagram explanation 6](#_Toc492630923)

[4.3. Interactive diagram 6](#_Toc492630924)

[5. User interface design 6](#_Toc492630925)

[6. Database design 6](#_Toc492630926)

[6.1. Entity relationship diagram 6](#_Toc492630927)

[6.2. Entity dictionary 6](#_Toc492630928)

[7. Algorithms 6](#_Toc492630929)

1. **Introduction**
   1. Project information
      * Project name: **Location-based Facebook Chatbot**
      * Project code: **LBFC**
      * Product type: **Facebook messenger bot + Web application**
      * Start date: **September 4th, 2017**
      * End date: **December 12th, 2017**
   2. Introduction
   3. Current situation
   4. Problem definition
   5. Proposed solution
      1. Feature functions
      2. Advantages
      3. Disadvantages
   6. Functional Requirements
   7. Roles and Responsibilities
2. **Software Project Management Plan**
   1. Problem definition
      1. Name of this project
      2. Problem abstract
      3. Project overview
         1. Current situation
         2. The proposed system
         3. Boundaries of the system
         4. Future plans
         5. Development environment
            1. Hardware requirement
            2. Software requirement
   2. Project organization
      1. Software process model
      2. Roles and responsibilities
      3. Tools and techniques
      4. Dependencies
   3. Project Management plan
      1. Tasks
         1. Initializing
         2. Planning
         3. Specifying requirements
         4. Designing database
         5. Create software design documents
         6. Implementing
         7. Testing
         8. Creating user’s manual
      2. Tasks sheet
      3. All meeting minutes
   4. Coding convention
3. **Software Requirement Specification**
   1. User requirement specification
      1. Guest requirement
      2. User requirement
      3. Administrator requirement
   2. System requirement specification
      1. External interface requirement
         1. User interface
         2. Hardware interface
         3. Software interface
         4. Communication protocol
      2. System overview use case
      3. Use cases
   3. Software system attribute
      1. Usability
         1. Graphic user interface
         2. Usability
         3. Installation
      2. Reliability
      3. Availability
      4. Security
      5. Maintainability
      6. Portability
      7. Performance
   4. Conceptual program
4. **Software Design Description**
   1. Design overview
   2. System architecture design
      1. Web application architecture description
   3. Component diagram
   4. Detailed description
      1. Class diagram
      2. Class diagram explanation
      3. Interactive diagram
   5. User interface design
   6. Database design
      1. Entity relationship diagram
      2. Entity dictionary
   7. Algorithms