Software Requirements Specification

BOT COUNSELLER

Version 2.0 approved

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Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Introduction

## Purpose: The aim of career counselling bot is to carry out a conversation between both human and machine. Some knowledge has been embedded into the machine so that it identifies the sentences and making a decision itself as response to answer a question. BOT COUNSELLER will be used as assistant which will help the user to select the specific field.

## Document Conventions

**ML:** MACHINE LEARNING

**NN:** NEURAL NETWORK

## Intended Audience and Reading Suggestions

THIS PROJECT is an AI based field counselling web application used by high school students.

This PROJECT is useful for field counselling of Students especially who wants to take admission in university across PAKISTAN.

## Product Scope

The whole education industry is under the umbrella of our bot. counselling is one of the major need of person. So the scope is well enough to help the people related to such field.

## References <https://hellotars.com/chatbot-templates/healthcare/rk958m/personal-counselling-chatbot>

<https://chatbotsmagazine.com/a-therapist-bot-actually-works-e27c72b9632e>

<https://woebot.io/>

# Overall Description

## Product Perspective

Context Diagram / DFD attached at the end

## Product Functions

Functional Hierarchy Diagram attached at the end

## User Classes and Characteristics A student will be able to maintain his\her profile. And the chat between the student and bot will be saved directly in database.

## Operating Environment Desktop Computer or laptop Browsers which have minimum support for HTML-5

### Design and Implementation Constraints Required time: June 2020 Tools and Technologies: Python Flask, Neural Network Security: Login Authentication

## User Documentation

Manual Document will be made in the end of the Project Submission to help out the Users

## Assumptions and Dependencies

The student must have knowledge of, how to operate computer and mobile. And can access browser. The application is fully web based, so user must know how to use browser.

# External Interface Requirements

## User Interfaces

* Web based GUI for input of data from user by using bootstrap
* Authentication of registration.

## Hardware Interfaces

* Core i3(min) or more
* 20gb hard disk
* 4gb Ram
* Mouse
* Keyboard
* Monitor/Led

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## Software Interfaces

* Windows 7 / 8 / 10 Operating system
* Programming language used: PYTHON
* SQL

## Communications Interfaces

HyperText Transfer Protocol will be used for communication between the user and the server.

# System Features

LOGIN / SIGNUP

BLOG POSTING

REVIEWS

ADMIN RIGHTS

CHAT

## Login

### Description

This feature allows any user to login into the web application, if the user doesn’t login in will not be able to perform its desired function. The admin will also login to manage the page.

### Stimulus/Response Sequences

* User/Admin/Counsellor
* System responds for entering password
* System prompts for successful completion if correct details entered.

### Functional Requirement

REQ-1: necessary to fill both fields of username and password

REQ-2: username and password must be valid

REQ-3: user must be registered

## Registration

### Description

Before the user can access the web application, its necessary for the user to be registered first.

### Stimulus/Response Sequences

* Enter name, user name, email, password.
* System responds registered successfully
* System prompts for successful completion if correct details entered

## Chat

### Description

After login user will be allowed to chat

## Blog posting

### Description

Write something here

### Stimulus/Response Sequence

Write something here

## Reviews

### Description

Write something here

### Stimulus/Response Sequence

Write something here

## Admin rights

### Description

Write something here

### Stimulus/Response Sequence

Write something here

# Other Nonfunctional Requirements

## Performance Requirements

Application will be reliable, responsive and secured. There will be real time guidance and support related to bidding of order and also creation of documents with easy

## Safety Requirements

There are no such safety requirements, the application/system will not harm anyone.

## Security Requirements

For Reusability: classes and functions will be reused in implementations,  
For Reliability: we will use try catch to handle exceptions to secure Application from crashing.  
For Flexibility: system will be module based and classes-based working in parallel.  
For Interoperability: web application will be connected to web server via APIs

## Business Rules

The User can access following features

1) LOGIN (all users)

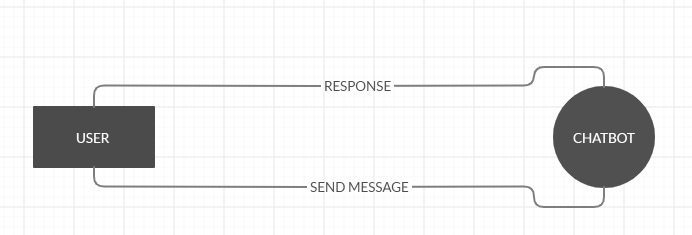
2) SIGN UP (students)

2) CHAT (student)

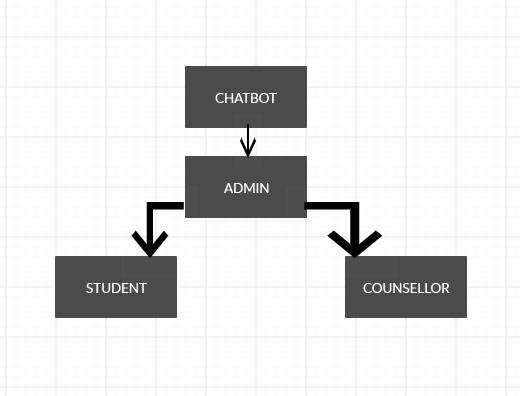
3) REVIEWS (student)

4) BLOGS (counsellor)

## CONTEXT DIAGRAM



**HIERARICAL DIAGRAM**

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