**MAIN PROJECT**

REVIEW – 1

**INTERVIEW PROCESS BASED CHATBOT**

**NAME : KARTHIKA.S.B**

**ROLL NO: 18LMCA07**

**GUIDE NAME: Mrs. S. SARANYA**

**INTERVIEW PROCESS BASED CHATBOT**

**ABSTRACT**

The project titled “**INTERVIEW PROCESS BASED CHATBOT**” is an employment-oriented service that operates via [websites](https://en.wikipedia.org/wiki/Website). The basic functionality of this software allows users (Student and Employees) to create [profiles](https://en.wikipedia.org/wiki/User_profile), which typically consist of a resume describing their work experience, education , location and skills and interest. Job interview schedule that finds the right people, place and works based on their resume. The user’s can click on any company site listed on their interviews. The Candidate’s interview notification sent to admin and let them know that you’ve got a new interview submission. After user interview submission, that chatbot that helps to organize and keep up to date user’s interview. Being offered an interview is exciting but can be quite daunting. So this software provides online mode of learning to users. User utilizes videos to create idea and concepts for their interview.

**DEFINING THE PROBLEM**

In the existing system, One of the major risks of this site manually collects considerable amounts of the job interview details dependent to user’s profile. More difficult to maintain and gathering information about specific job interviews will be time consuming. Chatbot are often seen to be complicated and require a lot of time to understand user’s requirement.

**DRAWBACKS**

* Inability to Understand
* **Time-Consuming**
* Negative Personal Data

**STUDY ON PROPOSED SYSTEM**

The proposed system is, the user profile helps you get found current interviews based on their location. Humans have a limit to the number of clients but chatbot can handle at once. Chatbot can handle multiple queries and give uniform standardized interactions. However the E-learning provided for audio and video learning can be rewound and seen and heard again and again if you do not happen to understand the topic first time around.

**ADVANTAGES**

* **Management of multiple clients**
* **Reduced costs**
* **Secured**
* 24\*7\*365 Availability

# DEVELOPING SOLUTION STRATEGIES

# MODULE

* Admin
* User
* Profile
* Interview
* Learning Skills
* Chatbot

**ADMIN**

The administrator is the authorized person to manage and monitor the complete process of Interview process based chatbot. The Admin can add the interview details, chatbot questions and learning skills videos and so on, interview notification being given by the user is viewed by the admin and rectify invalid question from chatbot.

**USER**

The user registers into the applications and login to the site using username and password. All users will be able to create their own profile and to access learning videos to achieve their interview. Selected interview questions user can be communicate with Chatbot.

**PROFILE**

The profile module displays details of user's current personal and professional status. Each of these sections can be managed individually.

**INTERVIEW**

In this interview module, the interview affiliated with a user's profile. This allows the user to view the Company website and apply for the interview they wish.

**LEARNING SKILLS**

This module based on formalised teaching but with the help of online mode, this learning about tutorial videos on aptitude, technical based (C, C++, Java etc) and motivational interview.

**CHATBOT**

The chatbot is a computer program that simulates human conversation through text chat. This chatbot is automated monitor the user interview and answer basic questions about the status of the interview. If this chatbot gives incorrect response the user can notify to admin.

**SYSTEM SPECIFICATION**

## HARDWARE SPECIFICATION

Processor **:** Intel core 2.00GHz

RAM **:** 4GB

Hard Disk Drive **:** 100GB

Monitor **:** 17” Color Monitor

**SOFTWARE SPECIFICATION**

Front End/GUI Tool **:** Geany

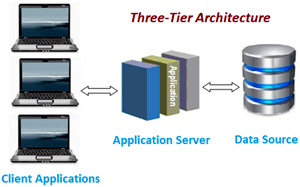
Operating System **:** Windows Family

Language **:** Python

Back End **:** MYSQL

**APPLICATION SPECIFICATION**

Three-tier architecture introduces a server (or an "agent") between the client and the server. The role of the agent is manifold. Translation services (as in adapting a legacy application on a mainframe to a client/server environment). Metering services (as inacting as a transaction monitor to limit the number of simultaneous requests to a given server). Intelligent agent services (as in mapping a request to a number of different servers, collating the results, and returning a single response to the client. A three tier distributed client/server architecture includes a user system interface top tier where user services (such as session, text input, dialog, and display management) reside.



**SOFTWARE ENVIRONMENT**

**FRONT-END TOOL – PYTHON**

Python is a high-level, interpreted, interactive and object-oriented scripting language was developed by Guido van Rossum. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance Many large companies use the Python programming language include NASA, Google, YouTube etc.

It used for :

* Web Development
* Software Development
* Mathematics
* System Scripiting

## PYTHON FEATURES

## Easy to Learn Use

## Python is easy to learn and use. It is developer-friendly and high level programming language.

## Expressive Language

## Python language is more expressive means that it is more understandable and readable.

## Interpreted Language

## Python is an interpreted language i.e interpreter executes the code line by line at a time. This makes debugging easy and thus suitable for beginners.

## Cross- Platform Language

## Python can run equally on different platforms such as Windows, Linux, Unix and Macintosh etc. So we can say that python is a portable language.

## Free and Open Source

## Python language is freely available at official web address. The source-code is also available. Therefore it is open source.

**Object-Oriented Language**

Python supports object-oriented language and concepts of objects and classes come into existence.

**Extendable**

It implies that other language such as C/C++ can be used to compile the code and thus it can be used further in your python code.

**Large Standard Library**

Python has a large and broad library and provides rich set of module and functions for rapid application development.

**GUI Programming Support**

Graphical user interface can be developed using Python.

**BACKEND - MYSQL**

MySQL is an [open source](https://en.wikipedia.org/wiki/Open-source_software) [relational database management system](https://en.wikipedia.org/wiki/Relational_database_management_system) (RDBMS). Its name is a combination of “My”, the name of co-founders [Michael Widenius](https://en.wikipedia.org/wiki/Michael_Widenius)'s daughter, and "[SQL](https://en.wikipedia.org/wiki/SQL)", the abbreviation for [Structured Query Language.](https://en.wikipedia.org/wiki/Structured_Query_Language) The MySQL development project has made its [source code](https://en.wikipedia.org/wiki/Source_code) available under the terms of the [GNU General Public License,](https://en.wikipedia.org/wiki/GNU_General_Public_License) as well as under a variety of [proprietary](https://en.wikipedia.org/wiki/Proprietary_software) agreements. MySQL was owned and sponsored by a single [for-profit](https://en.wikipedia.org/wiki/Business) firm, the [Swedish](https://en.wikipedia.org/wiki/Sweden) company [MySQL AB,](https://en.wikipedia.org/wiki/MySQL_AB) now owned by [Oracle Corporation.](https://en.wikipedia.org/wiki/Oracle_Corporation)

MySQL Community Edition is a freely downloadable version of the world's most popular open source database that is supported by an active community of open source developers and enthusiasts. MySQL Cluster Community Edition is available as a separate download. The reason for this change is so that MySQL Cluster can provide more frequent updates and support using the latest sources of MySQL Cluster Carrier Grade Edition.

**SQL FEATURES**

**Ease of Management –**The software very easily gets downloaded and also uses an event scheduler to schedule the tasks automatically.

**Robust Transactional Support –**Holds the ACID (Atomicity, Consistency, Isolation, Durability) property, and also allows distributed multi-version support.

**Comprehensive Application Development –**MySQL has plug in libraries to embed the database into any application. It also supports stored procedures, triggers, functions, views and many more for application development.

**High Performance –**Provides fast load utilities with distinct memory caches and table index partitioning.

**Secure Data Protection –**MySQL supports powerful mechanisms to ensure that only authorized users have access to the databases.

**Scalability & Flexibility –**With MySQL you can run deeply embedded applications and create data warehouses holding a humongous amount of data.

## COST ESTIMATION AND SCHEDULING

|  |  |
| --- | --- |
| **DESCRIPTION OF TASK** | **NO OF DAYS** |
| Abstract | 2 |
| Problem Statement | 2 |
| System Requirements | 10 |
| Design | 6 |
| Coding | 30 |
| Implementation | 8 |
| Testing | 9 |
| Reports | 1 |
| Deployment | 2 |
| Scope | 1 |
| **Total** | 71 days |

Software cost is related to many variables such as Human, Technical, Environment and Effort applied to develop it. To estimate the effort needed for the software project, Function Point Analysis (FPA) and COCOMO model are used to predict the size and cost of developing the system.

COCOMO, Constructive Cost Model, is a good measure for estimating the number of person-months required to develop software. COCOMO consists of a hierarchy of three increasingly detailed and accurate forms. The first level, Basic COCOMO is good for quick, early, rough order of magnitude estimates of software costs, but its accuracy is limited due to its lack of factors to account for difference in project attributes (Cost Drivers). The COCOMO cost estimation formula is

E = c\*size k

Where, E = effort in person-months. The effort measure helps to make estimates like the number of person months that will take for the project to excute.

The Size estimate is converted in to effort estimate.

c = 3.0 for semidetached mode

k = 1.12 in semidetached mode

Size = (SLOC) / 1000 = 3.0

Thus the effort for making portal system is 10.31 pm.

D = a\*Eh

Where

D = Development time in chronological months

a = 2.5 in semi-detached mode

h = 0.38 in semi-detached mode

No of days worked = 71 days

1 day work = 7 Hours

Total no of hours = 497 Hours

Cost for 1 hour = 100 ₹

Total number of cost = Total number of hours\*cost for 1 hour = 497 \*100 = ₹. 49,000/-

Therefore total cost of the product is **₹. 49,700/-**

**FINAL OUTLINE OF PROPOSED SYSTEM**

The System provides a user- friendly interface. Although traditional human interview process method is accepted worldwide, it can be replaced to some extent by using chatbot. We have provided an interview study to illuminate users' confidence in this software.