**JENNIFER**

**Introduction:**

Jennifer is an AI system that has built to control home and perform basic tasks, such as turning all the electronics off or on, control a particular room’s temperature, playing music, opening doors, and so on. The home AI uses natural language processing and speech recognition to understand the user’s voice, and the context of the command, in order to perform the tasks it is asked to do.

**Clear Statement of the Problem:**

The problem is that when we don’t want to do things physically like turning off/on the lights, fans and other electronic machines. Then we want a type of system that does everything by recognise the voice/vocals. Because the nature of the humans always want ease to do works and solve real life problem that’s why the technology is increasing day by day to reduce humans’ effort.

**Objectives & Scope:**

The basic objective is to reduce human’s effort. This system will play music by saying “I want to listen music.” And Jennifer will reply “Okey Sir!” And music will be played in the speakers. You don’t need to search music on the google or youtube. It doesn’t matter either you are doing your working or doing some other jobs. You just say “Turn off the light.” And lights will be turned off. It will cover all electronic devices or electronic machines in specific are like home, office, class rooms etc.

**Project Plan:**

Project plan will be designed with the collaboration of the supervisor.

**Resources Required:**

List here required resources

**Hardware Resources Required:**

* Arduino MEGA
* Voice Recognition Module
* Mic
* Full Internet access

**Software Resources Required:**

* Microsoft Visual Studio 2017
* Arduino
* Adobe Photoshop
* Adobe Illustrator
* Autodesk Maya
* Adobe Character Animator

**User Requirements:**

* Able to connect with aurdino using Wifi/Bluetooth
* Able to connect with Wifi/Bluetooth with password
* Able to turn on/off the lights using voice command
* Able to turn on/off the electric fan using voice command
* Able to listen the desire music
* Able to get the Azan notification from Jennifer
* Able to set the Alarm time

**Actors:**  
1. Sender   
2. Receiver

**Fucntional Requirements - Login System:**

|  |  |
| --- | --- |
| FR01.01 | The system shall get the username |
| FR01.02 | The system shall get the password |
| FR01.03 | System shall allow user to Remember his username and password |

**Fucntional Requirements – Set The Notification:**

|  |  |
| --- | --- |
| FR01.01 | System shall allow the user to set the alarm |
| FR01.02 | System shall allow the user to set the Azan alarm |
| FR01.03 | System shall allow the user to send the voice command |
| FR01.04 | System shall allow the button for encryption |

**Non – Functional Requirements :**

|  |  |
| --- | --- |
| FR01.01 | The software must be coded in Xamarin, C# and Arduino programming |