**2.2.2 Shazam(إبراهيم السيف)**



**Definition of Shazam application:-**

Shazam is an application that can identify music, movies, TV shows and clips in general by taking a sample of the audio clip, and this is done using the device's microphone.

**Who are the users of the application-:?**

Users of the Shazam application are the ones who want to find the name of the music or audio track that was searched, the Shazam application allows them to find the name of the music or audio track that they want.

**Shazam application advantages and disadvantages:-**

* **Advantages:**
* easy to use.
* Easy to discover music.
* Recognizes the voice in ten second.
* **Disadvantages**:
* The user can not sing the song and search for it.
* It is not easy to recognize the reader.

**Technology used in Shazam application:-**

The Shazam application uses the microphone of the mobile phone or the device in which the application is located to identify the audio clip, and Shazam uses fingerprint technology to puts it in a graph through which the audio clip is fragmented and searched in databases.

**Problem statement:-**

Many voice recognition applications are not specialized in recognizing the voice of the Quran reader, in this project we will solve the problem of these applications by collecting certain data about Quran readers and identifying them. Through voice recognition algorithms.

Chapter 3: requirements:(ابراهيم)

In this chapter, we will talk about the functional and non-functional requirements of the proposed system and user, what quality is required of the system, and what is the response time.

3.1 Functional requirements:(ابراهيم)

They are the features and functions of the system that the system developer must implement to enable the user to use the system as required. The functional requirements are divided into two parts:

1. User requirements.
2. System requirements.

In this section of the chapter we will talk about what are the user requirements and what are the system requirements.

3.1.1 User requirements:(ابراهيم)

User requirements are what the user shall or should have to use the system as required, in this section we will review the points of the user requirements:

1. The user shall have the microphone.
2. The user shall be connected to the internet.
3. The user shall have small clip from the voice of his Quran reader.
4. The user must test specific Quran readers.
5. The user should test the system in a quiet place to capture the voice of the reader.

3.1.2 System requirements

3.2 non - Functional requirements

3.2.1 Quality

3.2.2 response time