Chapter 1

INTRODUCTION

1.1 OVERVIEW OF THE SYSTEM

The Music Streaming Website is developed for music companies/bands who are apparently seeking to invest in the music streaming industry across the globe which in result to acquire profitable revenue. However, the craze over the music is a perpetual process where the majority of music listeners are constantly are on music applications to enjoy the rhythm in their headphones just within a matter of clicks. Certainly, the growth of music listeners auditory is progressively transforming into Music Consumer Market. This has directed to mushroom some global music application giants like Spotify, Sound Cloud etc. These promising facts are the reasons that tempt every aspiring professional to build a music streaming website/app just alike Spotify. The Website also targets several other audiences who are interested in listening to music and are regular streamers of music. People of any age group can access this website since there are different categories on this site. There are over hundreds of music to choose from, along with different genres of music. The Website is also very user-friendly even people with very less knowledge can use this site without any problems.

1.2 FEATURES OF THE MUSIC STREAMING WEBSITE

- **User profiles and authorization**: forms for users to register and login, using email address or social media accounts
- **Audio streaming service**: to enable constant online access to music files through cloud storages
- **Search and organize options**: search and navigate algorithms to find songs by titles or artists, and save favorite tracks
- **Playlists**: that users can save, edit and listen and share both in online and offline
- **Notifications**: to get news from friends, artists and community.

1.3 APPLICATIONS

This application is built such a way that it should suits for all type of Users in future. So, every effort is taken to implement this project in this Music industry. Music Streaming Website is a

community-driven music streaming service where you can experience every kind of music which a commercial music streaming service like Spotify.

1.4 OBJECTIVES

The main objective of this application is to automate the complete operations of the users who are willing to listen to music and music industry that are constantly releasing new music daily. This website maintains a list of hundreds of songs that are being released. Also searching through the list should be very faster so they can find required song instantly.

Target audience

- Men and women who are avid music listeners
- On-the-go and active users
- Music listeners who prefer to create unique playlists
- Music listeners who prefer to search artists, songs, albums, etc.
- Listeners who want advertisement-free music
- Users who are highly knowledgeable with technology and music

Chapter 2

REQUIREMENT ANALYSIS

2.1 INDUSTRY ANALYSIS

First of all, it is important to analyze the music industry, its markets, its revenues stream and then analyze Spotify thought the researches that has been done and from the theory seen in the literature review. Then, the new business model of a record company will be defined from the industry analysis and the interview that has been conducted. This business model will be tested through its application in Sweden. Indeed, Sweden is a precursor in the use of the streaming platform, so it is interesting to see if it works or not in this country. From this case study, it will then be possible to know if it is viable or not and if there are changes needed, or what changes could occur in the coming years.

2.2 MARKET ANALYSIS

As it has been said previously, in 2015 the music industry grew by 3,5% thanks to the new streaming technology (Rauline, 2016). It is now important to quickly describe and understand the different types of revenues for the industry and thereby understand the importance and the growing power of the streaming platform. In order to be able to do that a market analysis is needed. The music market is the fact of selling music through or delivering music, the CD sellers operate in this market, same as Spotify or iTunes, they are all competitors. In other words, the function of this market is to sell music. This market can then be divided in two parts: the digital market place and the physical. Those are composed of different segments that correspond to certain features and benefits wanted by the consumers, as it has been seen in the literature review. The physical segment is composed of the CDs and Vinyl. While the digital segment is composed of the streaming platform but also the downloading such as iTunes or the illegal ones: Torrent etc. In 2015, the downloads revenues decreased by 10.5% while the streaming revenues grew by 45.2% (IFPI, 2016). Those two forms the digital revenues. In 2015 in the US, the consumption of the music streaming grew by 93%. Below is a diagram that represents the growth of the streaming segment from 2011 to 2015.

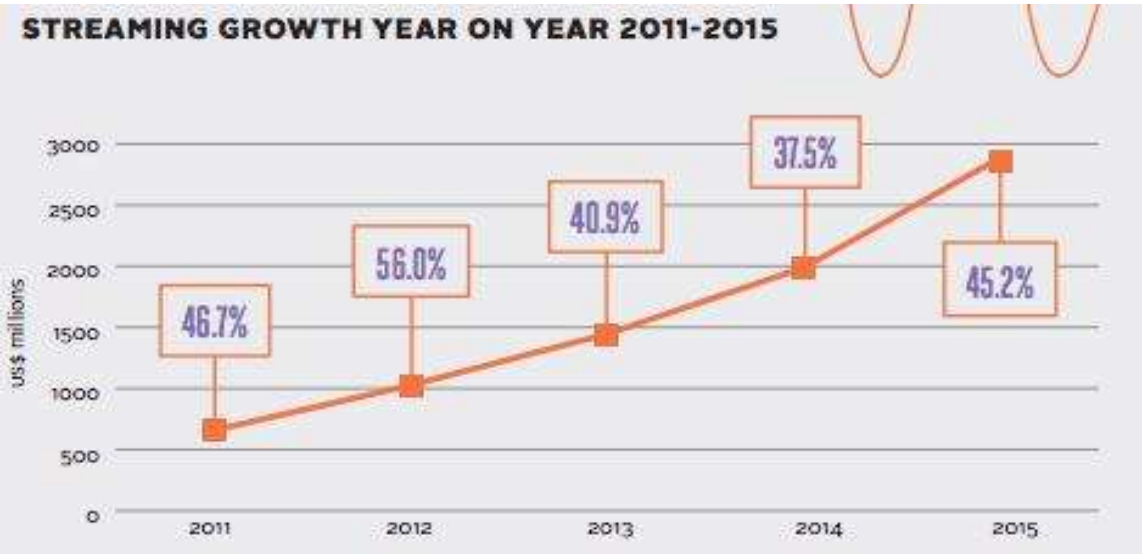

Figure 2.1 - Streaming Growth Year on Year 2011-2015

This shows the exponential growth of the streaming platform as well as the growth of the demand from the consumers, to consume music by using those platforms. According to Mr. Simcoe's Marketing System, that has been seen in the literature review, what has apparently changed is the Placement where the music is available, but the Promotion might have changed as well. This diagram represents a situational factor, which is the demand of consuming music through the streaming platform. From this situational factor, the companies in the industry can then create value and/or a sustainable competitive advantage, this will be covered later in this part. In order to get to this point, an analysis of the revenue must be done.

2.3 SPOTIFY ANALYSIS

Spotify is a music streaming platform that was created in 2006 (Nicolaou, 2017). It is a Swedish company that leads the streaming market with 50m paid users in March 2017 and 100m active user (June 2016) (Spotify Press, 2017) ,while Apple Music, the second streaming platform in the world, had 20.9m users in 2016 (Nicolaou, 2017). They offer over 30 million song and 2 billion playlists in 60 countries all over the world (Spotify Press, 2017). Spotify offers to ways to listen to music, the first one is free, but the user has to listen to advertisings between two songs, the second is subscription based, around €10 per month with unlimited access to their music data base. Spotify revenues in 2015 €1.945 billions, which represents a growth of 80% compared to 2014 where the revenues were €1.082 billions (Ingham, 2016). This seems very impressive and like a very profitable company, but the problem is that Spotify

has never been profitable since its creation. In 2014, the losses were €162.3 million and in 2015 they were €173.1 million (Ingham, 2016). Even if the losses grew slower than the revenues, it is an issue as the growth of the whole music industry reposes on the streaming platform, as it has been seen before.

In 2015, Spotify payed €1.63 billion to the music industry as royalties and in 2014 they payed €882.463 million, which represents a growth of 85% between the two years (Ingham, 2016). What can be said is that the more Spotify makes revenues, the more they have to pay royalties, but is this viable? Spotify gives back the money to the different actors of the industry. Spotify only keeps 30% of its revenues for themselves, the other 70% are divided between the different actors of the music industry. How do they divide it? They split them according to the amount of songs listened (Oeillet, 2014). For example, let's say that the total amount of listened songs is 1 billion, one artist has 1 million listened. What they do is that they divide 1 million by 1 billion which is 0.001. It means then that this artist will get 0.001% of the 70% of Spotify's revenues.

2.4 TECHNICAL FEASIBILITY

- The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system whether they are of latest technology or not. It happens that after a system is prepared a new technology arises and the user wants the system based on that technology.
- This system use Windows platform, HTML, CSS, Bootstrap, JavaScript, as front end technology, MySQL and PHP as backend technology and PHP software that running on server. Thus Students Blog is technically feasible.

2.5 ECONOMICAL FEASIBILITY

- Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as benefit analysis using HTML, CSS and JavaScript and MySQL easily available in internet. The economic feasibility study evaluates the cost software development against the ultimate income or benefits get from the developed system. There must be scope for profit after the success completion of the project

2.6 OPERATIONAL FEASIBILITY

- The project has been developed in such a way that it becomes very easy even for a person with little computer knowledge to operate it. This software is very user friendly and does not require any technical person to operate. Thus the project is even operationally feasible.
- Operational feasibility study tests the operational scope of the software to be developed. The proposed software must have high operational feasibility. The usability will be high.

Chapter 3

SOFTWARE REQUIREMENTS SPECIFICATION

3.1 HARDWARE REQUIREMENT

The section of hardware configuration is an important task related to the software development insufficient random-access memory may affect adversely on the speed and efficiency of the entire system.

The process should be powerful to handle the entire operations. The hard disk should have sufficient capacity to store the file and application.

Processor: Pentium IV and above

Processor speed: 1.4 GHz Onwards

System memory: Minimum 10 GB recommended

Cache size: 1024 KB

RAM: 1 GB (Minimum)

Hard disk: 100 GB

Monitor: SVGA Color 15”

Mouse: Compatible mouse

Keyboard: Normal or Multimedia.

3.2 SOFTWARE REQUIREMENT:

A major element in building a system is the section of compatible software since the software in the market is experiencing in geometric progression. Selected software should be acceptable by the firm and one user as well as it should be feasible for the system. This document gives a detailed description of the software requirement specification. The study of requirement specification is focused specially on the functioning of the system. It allows the developer or analyst to understand the system, function to be carried out the performance level to be obtained and corresponding interfaces to be established.

Front End: HTML 5, PHP 7

Back End: MySQL

Editor Used: Sublime Text 3

IDE used: Xampp v3.2.2

3.3 TOOLS AND TECHNOLOGIES

HTML, CSS, JavaScript

Hypertext Markup Language (**HTML**) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <img/> and <**input** /> directly introduce content into the page. Other tags such as <**p**> surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles. It has an API for working with text, arrays, dates, regular expressions, and basic manipulation of the DOM, but the language itself does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded. JavaScript typically relies on a run-time environment (e.g., a Web browser) to provide objects and methods by which scripts can interact with the environment (e.g., a webpage DOM). It also relies on the run-time environment to provide the ability to include/import scripts (e.g., HTML `<script>` elements). This is not a language feature per se, but it is common in most JavaScript implementations.

MySQL

MySQL is an open source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality. [8]

MySQL is a central component of the LAMP open-source web application software stack (and other "AMP" stacks). LAMP is an acronym for "Linux, Apache, MySQL, and Perl/PHP/Python". Applications that use the MySQL database include:

- TYPO3
- MODx
- Joomla
- WordPress
- Simple Machines Forum
- phpBB
- MyBB and
- Drupal.

Major features as available in MySQL 5.6:

A broad subset of ANSI SQL 99, as well as extensions

- Cross-platform support
- Stored procedures, using a procedural language that closely adheres to SQL/PSM
- Triggers
- Cursors

Chapter 4

ANALYSIS AND DESIGN

4.1 ANALYSIS

The three-schema approach is software engineering concept that enables the database user to separate the user application and physical database. In this architecture, schemas can be defined at 3 levels:

- internal level or internal schema: It describes the physical storage structure of the database, the internal schema uses physical data model and describes the complete details of data storage and access paths of the database
- conceptual schema or conceptual level: describes the structure of the whole database for a community of users it hides the details of the physical storage structures and concentrates on describing the entities, data types, relationships and constraints
- external level or external schema: it includes a number of users views each view describes the part of the database that the database user is interested in and hides the rest of the database from user, implementation data model can be used at this level

This system uses windows platform, java net beans as front-end technology and Oracle 11g as backend technology. Thus, Music Streaming Website is technically feasible. Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as benefit analysis using java net beans and Oracle 11g easily available in internet. The section of hardware configuration is an important task related to the software development insufficient random-access memory may affect adversely on the speed and efficiency of the entire system.

The process should be powerful to handle the entire operations. The hard disk should have sufficient capacity to store the file and application. A major element in building a system is the section of compatible software since the software in the market is experiencing in geometric progression. Selected software should be acceptable by the firm and one user as well as it should be feasible for the system

4.2 DESIGN

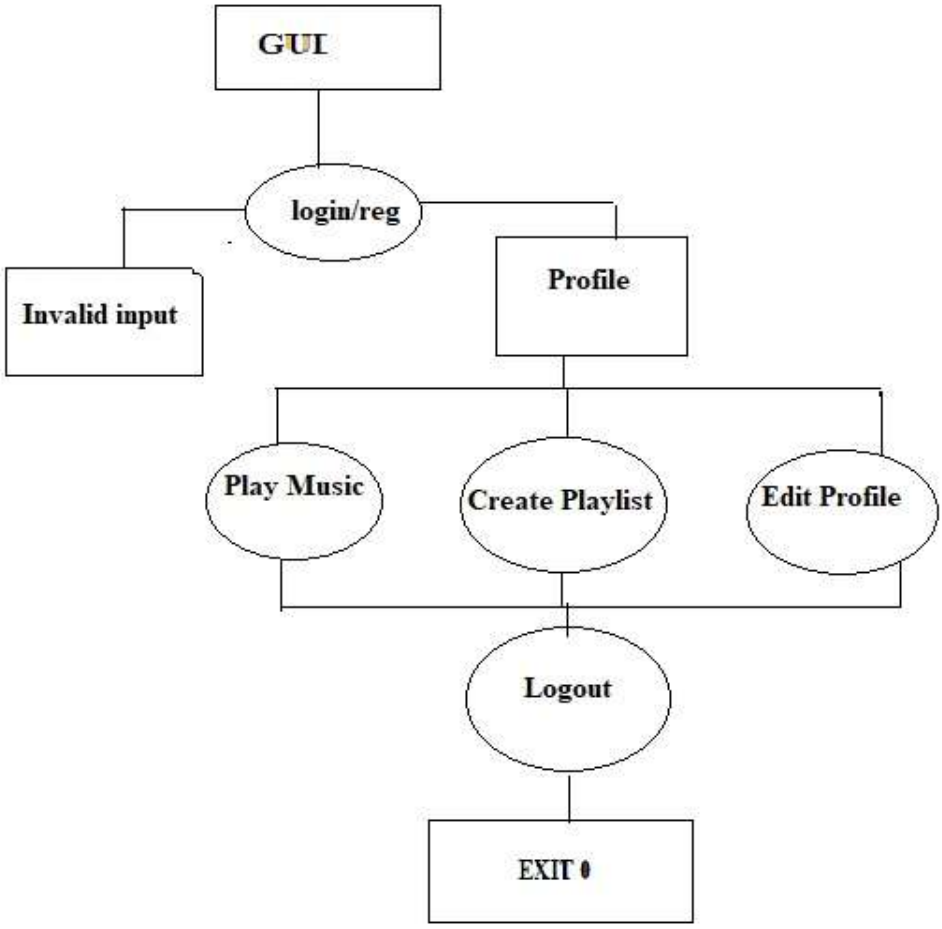

Figure 4.1 – Flow Diagram

Chapter 5

IMPLEMENTATION

5.1 BACKEND

SQL Table creation

Table structure for table `albums`

```
CREATE TABLE IF NOT EXISTS `albums` (
`id` int(11) NOT NULL,
  `title` varchar(250) NOT NULL,
  `artist` int(11) NOT NULL,
  `genre` int(11) NOT NULL,
  `artworkPath` varchar(500) NOT NULL) ENGINE=InnoDB  DEFAULT CHARSET=latin1 AUTO_INCREMENT=8 ;
```

Dumping data for table `albums`

```
INSERT INTO `albums` (`id`, `title`, `artist`, `genre`, `artworkPath`) VALUES
(1, 'Bacon and Eggs', 2, 4, 'assets/images/artwork/clearday.jpg'),
(2, 'Pizza head', 5, 10, 'assets/images/artwork/energy.jpg'),
(3, 'Summer Hits', 3, 1, 'assets/images/artwork/goinghigher.jpg'),
(4, 'The movie soundtrack', 2, 9, 'assets/images/artwork/funkyelement.jpg'),
(5, 'Best of the Worst', 1, 3, 'assets/images/artwork/popdance.jpg'),
(6, 'Hello World', 3, 6, 'assets/images/artwork/ukulele.jpg'),
(7, 'Best beats', 4, 7, 'assets/images/artwork/sweet.jpg');
```

Table structure for table `artists`

```
CREATE TABLE IF NOT EXISTS `artists` (
`id` int(11) NOT NULL,
 `name` varchar(50) NOT NULL) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=6 ;
```

Dumping data for table `artists`

```
INSERT INTO `artists` (`id`, `name`) VALUES
(1, 'Mickey Mouse'),
(2, 'Goofy'),
(3, 'Bart Simpson'),
(4, 'Homer'),
(5, 'Bruce Lee');
```

Table structure for table `genres`

```
CREATE TABLE IF NOT EXISTS `genres` (
`id` int(11) NOT NULL,
 `name` varchar(50) NOT NULL) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=11 ;
```

Dumping data for table `genres`

```
INSERT INTO `genres` (`id`, `name`) VALUES
(1, 'Rock'),
(2, 'Pop'),
(3, 'Hip-hop'),
(4, 'Rap'),
```

```
(5, 'R & B'),
(6, 'Classical'),
(7, 'Techno'),
(8, 'Jazz'),
(9, 'Folk'),
(10, 'Country');
```

Table structure for table `playlists`

```
CREATE TABLE IF NOT EXISTS `playlists` (
`id` int(11) NOT NULL,
  `name` varchar(50) NOT NULL,
  `owner` varchar(50) NOT NULL,
  `dateCreated` datetime NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;
```

Table structure for table `playlistSongs`

```
CREATE TABLE IF NOT EXISTS `playlistSongs` (
`id` int(11) NOT NULL,
  `songId` int(11) NOT NULL,
  `playlistId` int(11) NOT NULL,
  `playlistOrder` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;
```

Table structure for table `Songs`

```
CREATE TABLE IF NOT EXISTS `Songs` (
`id` int(11) NOT NULL,
  `title` varchar(250) NOT NULL,
  `artist` int(11) NOT NULL,
  `album` int(11) NOT NULL,
  `genre` int(11) NOT NULL,
  `duration` varchar(8) NOT NULL,
  `path` varchar(500) NOT NULL,
  `albumOrder` int(11) NOT NULL,
  `plays` int(11) NOT NULL
) ENGINE=InnoDB  DEFAULT CHARSET=latin1 AUTO_INCREMENT=32 ;
```

Dumping data for table `Songs`

```
INSERT INTO `Songs` (`id`, `title`, `artist`, `album`, `genre`, `duration`, `path`, `albumOrder`, `plays`) VALUES
(1, 'Acoustic Breeze', 1, 5, 8, '2:37', 'assets/music/bensound-acousticbreeze.mp3', 1, 10),
(2, 'A new beginning', 1, 5, 1, '2:35', 'assets/music/bensound-anewbeginning.mp3', 2, 4),
(3, 'Better Days', 1, 5, 2, '2:33', 'assets/music/bensound-betterdays.mp3', 3, 10),
(4, 'Buddy', 1, 5, 3, '2:02', 'assets/music/bensound-buddy.mp3', 4, 13),
(5, 'Clear Day', 1, 5, 4, '1:29', 'assets/music/bensound-clearday.mp3', 5, 8),
(6, 'Going Higher', 2, 1, 1, '4:04', 'assets/music/bensound-goinghigher.mp3', 1, 29),
(7, 'Funny Song', 2, 4, 2, '3:07', 'assets/music/bensound-funnysong.mp3', 2, 11),
(8, 'Funky Element', 2, 1, 3, '3:08', 'assets/music/bensound-funkyelement.mp3', 2, 24),
(9, 'Extreme Action', 2, 1, 4, '8:03', 'assets/music/bensound-extremeaction.mp3', 3, 26),
(10, 'Epic', 2, 4, 5, '2:58', 'assets/music/bensound-epic.mp3', 3, 16),
```

(11, 'Energy', 2, 1, 6, '2:59', 'assets/music/bensound-energy.mp3', 4, 21),

(12, 'Dubstep', 2, 1, 7, '2:03', 'assets/music/bensound-dubstep.mp3', 5, 21),

(13, 'Happiness', 3, 6, 8, '4:21', 'assets/music/bensound-happiness.mp3', 5, 3),

(14, 'Happy Rock', 3, 6, 9, '1:45', 'assets/music/bensound-happyrock.mp3', 4, 8),

(15, 'Jazzy Frenchy', 3, 6, 10, '1:44', 'assets/music/bensound-jazzyfrenchy.mp3', 3, 8),

(16, 'Little Idea', 3, 6, 1, '2:49', 'assets/music/bensound-littleidea.mp3', 2, 11),

(17, 'Memories', 3, 6, 2, '3:50', 'assets/music/bensound-memories.mp3', 1, 6),

(18, 'Moose', 4, 7, 1, '2:43', 'assets/music/bensound-moose.mp3', 5, 2),

(19, 'November', 4, 7, 2, '3:32', 'assets/music/bensound-november.mp3', 4, 5),

(20, 'Of Elias Dream', 4, 7, 3, '4:58', 'assets/music/bensound-ofeliasdream.mp3', 3, 3),

(21, 'Pop Dance', 4, 7, 2, '2:42', 'assets/music/bensound-popdance.mp3', 2, 10),

(22, 'Retro Soul', 4, 7, 5, '3:36', 'assets/music/bensound-retrosoul.mp3', 1, 10),

(23, 'Sad Day', 5, 2, 1, '2:28', 'assets/music/bensound-sadday.mp3', 1, 9),

(24, 'Sci-fi', 5, 2, 2, '4:44', 'assets/music/bensound-scifi.mp3', 2, 2),

(25, 'Slow Motion', 5, 2, 3, '3:26', 'assets/music/bensound-slowmotion.mp3', 3, 3),

(26, 'Sunny', 5, 2, 4, '2:20', 'assets/music/bensound-sunny.mp3', 4, 18),

(27, 'Sweet', 5, 2, 5, '5:07', 'assets/music/bensound-sweet.mp3', 5, 14),

(28, 'Tenderness ', 3, 3, 7, '2:03', 'assets/music/bensound-tenderness.mp3', 4, 12),

(29, 'The Lounge', 3, 3, 8, '4:16', 'assets/music/bensound-thelounge.mp3 ', 3, 6),

(30, 'Ukulele', 3, 3, 9, '2:26', 'assets/music/bensound-ukulele.mp3 ', 2, 18),

(31, 'Tomorrow', 3, 3, 1, '4:54', 'assets/music/bensound-tomorrow.mp3 ', 1, 9);

Table structure for table `users`

```
CREATE TABLE IF NOT EXISTS `users` (
`id` int(11) NOT NULL,
  `username` varchar(25) NOT NULL,
  `firstName` varchar(50) NOT NULL,
  `lastName` varchar(50) NOT NULL,
  `email` varchar(200) NOT NULL,
  `password` varchar(32) NOT NULL,
  `signUpDate` datetime NOT NULL,
  `profilePic` varchar(500) NOT NULL
) ENGINE=InnoDB  DEFAULT CHARSET=latin1 AUTO_INCREMENT=3 ;
```

5.2 FRONT END SOURCE CODE

Config.php

```
<?php
        ob_start();
        session_start();
        $timezone = date_default_timezone_set("Europe/London");
        $con = mysqli_connect("localhost", "root", "", "slotify");
        if(mysqli_connect_errno()) {
        echo "Failed to connect: " . mysqli_connect_errno();
        }
?>
```

Header.php

```
<?php
include("includes/config.php");
include("includes/classes/User.php");
include("includes/classes/Artist.php");
include("includes/classes/Album.php");
include("includes/classes/Song.php");
include("includes/classes/Playlist.php");
//session_destroy(); LOGOUT
if(isset($_SESSION['userLoggedIn'])) {
	$userLoggedIn = new User($con, $_SESSION['userLoggedIn']);
	$username = $userLoggedIn->getUsername();
	echo "<script>userLoggedIn = '$username';</script>";
}
else {
	header("Location: register.php");
}
?>
<html>
<head>
	<title>Welcome to Slotify!</title>
	<link rel="stylesheet" type="text/css" href="assets/css/style.css">
	<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
	<script src="assets/js/script.js"></script>
</head>
```

```
<body>
	<div id="mainContainer">
		<div id="topContainer">
			<?php include("includes/navBarContainer.php"); ?>
			<div id="mainViewContainer">
				<div id="mainContent">
```

Loginhandler.php

```
<?php
if(isset($_POST['loginButton'])) {
	//Login button was pressed
	$username = $_POST['loginUsername'];
	$password = $_POST['loginPassword'];
	$result = $account->login($username, $password);
	if($result == true) {
		$_SESSION['userLoggedIn'] = $username;
		header("Location: index.php");
	}
}
?>
```

Registerhandler.php

```
<?php
function sanitizeFormPassword($inputText) {
	$inputText = strip_tags($inputText);
	return $inputText;
}
```

```
function sanitizeFormUsername($inputText) {
	$inputText = strip_tags($inputText);
	$inputText = str_replace(" ", "", $inputText);
	return $inputText;
}
function sanitizeFormString($inputText) {
	$inputText = strip_tags($inputText);
	$inputText = str_replace(" ", "", $inputText);
	$inputText = ucfirst(strtolower($inputText));
	return $inputText;
}
if(isset($_POST['registerButton'])) {
	//Register button was pressed
	$username = sanitizeFormUsername($_POST['username']);
	$firstName = sanitizeFormString($_POST['firstName']);
	$lastName = sanitizeFormString($_POST['lastName']);
	$email = sanitizeFormString($_POST['email']);
	$email2 = sanitizeFormString($_POST['email2']);
	$password = sanitizeFormPassword($_POST['password']);
	$password2 = sanitizeFormPassword($_POST['password2']);
	$wasSuccessful = $account->register($username, $firstName, $lastName, $email, $email2, $password, $password2);
	if($wasSuccessful == true) {
		$_SESSION['userLoggedIn'] = $username;
		header("Location: index.php");
?>
```

Chapter 6

TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every convincible fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies, and/or finished product. It is the process of exercising software with the intent of ensuring that the software system meets its requirements and user expectations and does not fail in an unacceptable manner.

6.1 UNIT TESTING

Unity testing is a method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures and operating procedures For unit testing first we adopted the code testing strategy, which examined the logic of program. During the development process, itself all the syntax errors are rooted out. For this developed test case that result in executing every instruction in the program.

Output testing:

After performing validation testing, the next step is output testing of the proposed system. Since the system cannot be useful if it does not procedure the required output. Asking the user about the user about tis required format in which the system is required tests the output displayed or generated by the system under consideration.

GUI Testing

GUI testing is use to ensure the visual clarity of the system, flexibility of the system, user friendliness of the system. The various component that are to be tested are:

- Relative layout
- Various Buttons

6.2 VALIDATION TESTING

At the culmination of black box testing, software is completely assembled is a package. Interfacing errors have uncovered and the correct and final states of tests i.e. validation is defined with a simple definition that validation succeeds when the software function in a manner that can be reasonably accepted by the customer.

6.3 ACCEPTANCE TESTING

The system is tested with data supplied by the system customer rather than simulated test data.

TEST CASES	DESCRIPTION	EXPECTED OUTPUT	ACTUAL OUTPUT	RESULT
1	Login Page	User_id = admin and password = admin	User_id = Naveen_123 and password = abcd	PASS
2	Creating users	Post_userName= abc, Post_Email=name@gmail.com, Post_Pass=name123	Successfully Registered	PASS
3	Welcome Page	View all Posts	View all Posts	PASS
4	Playlist Page	Creates Personalized Playlist	Creates Personalized Playlist	PASS

6.4 Snapshots

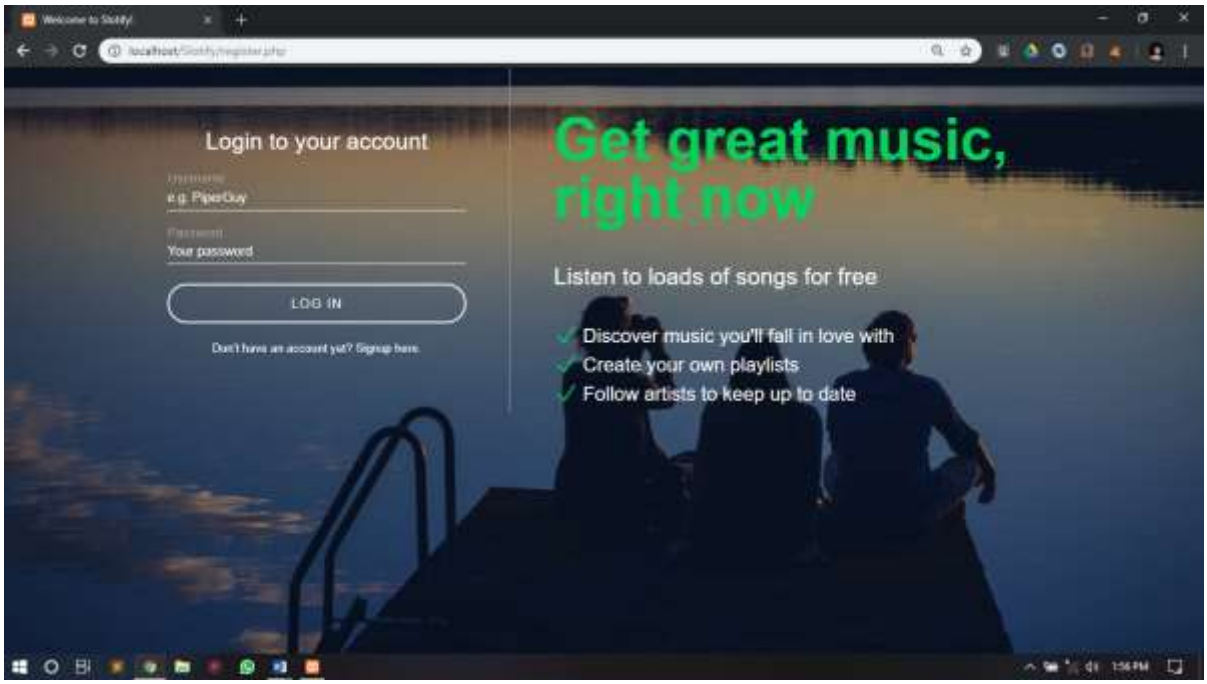

Fig 6.1: Home/login page

Home Page: It is the first page where user needs to register or login to enter the main page.

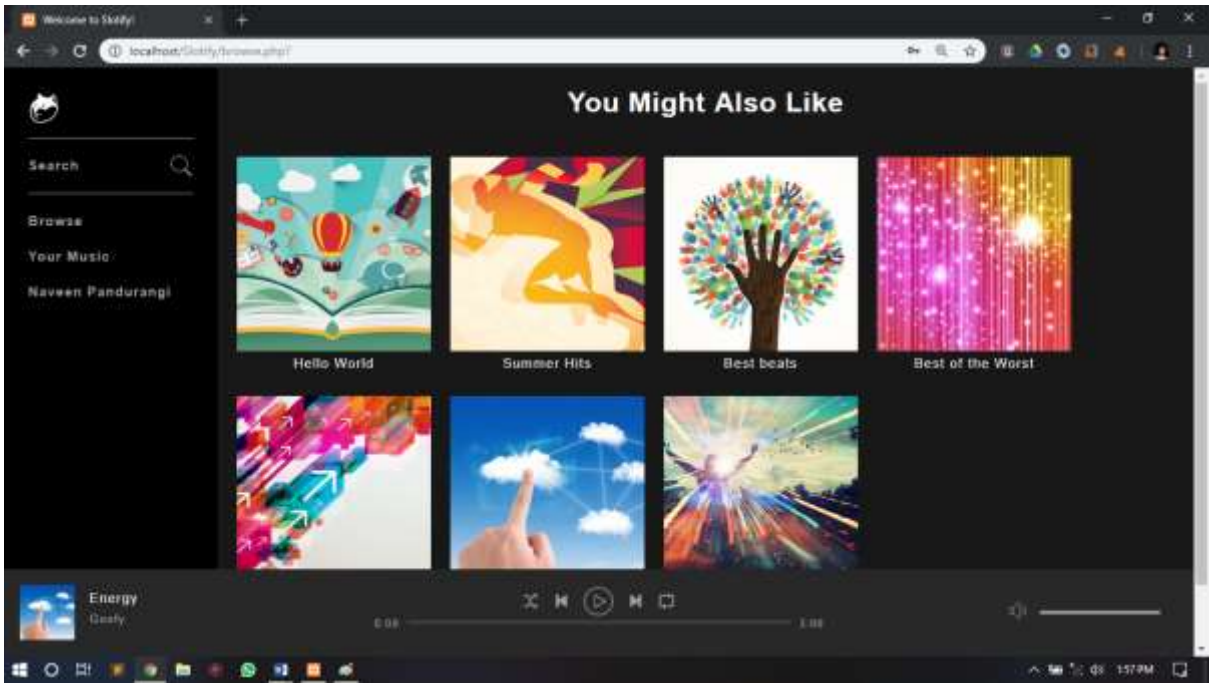

Fig 6.2: profile page

PROFILE PAGE: where the user can play songs and search for new songs.

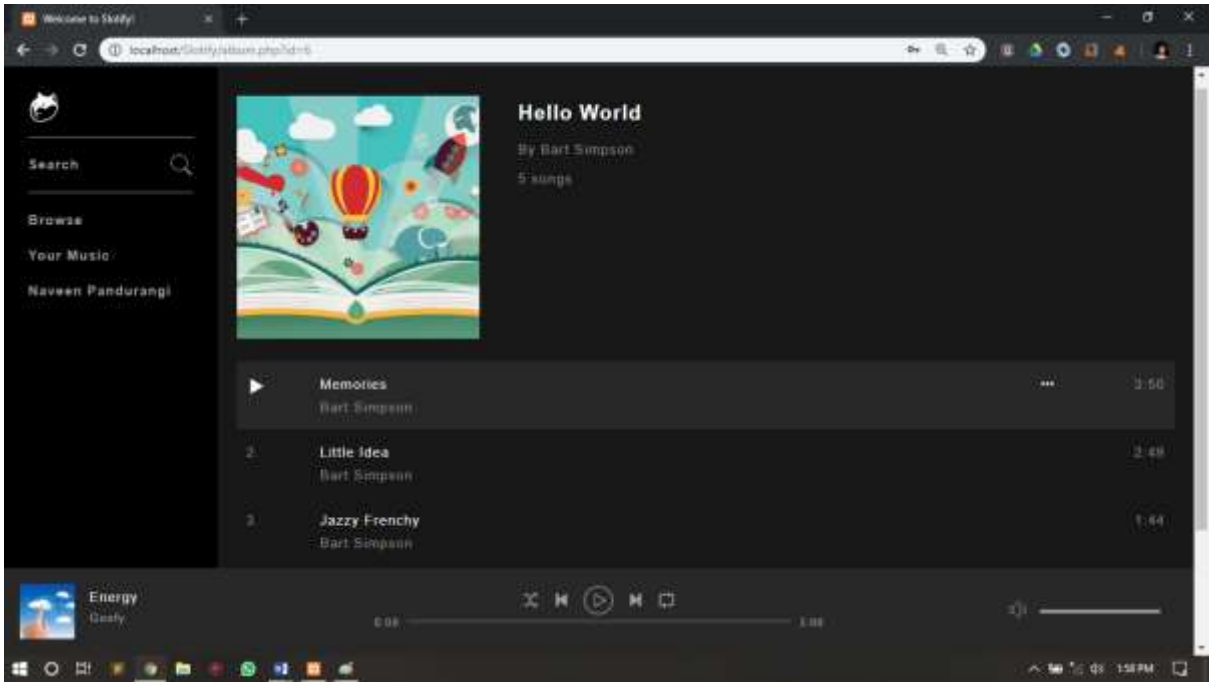

Fig 6.3: Music album page

MUSIC ALBUM PAGE: a page where the user can check for the albums and play songs.

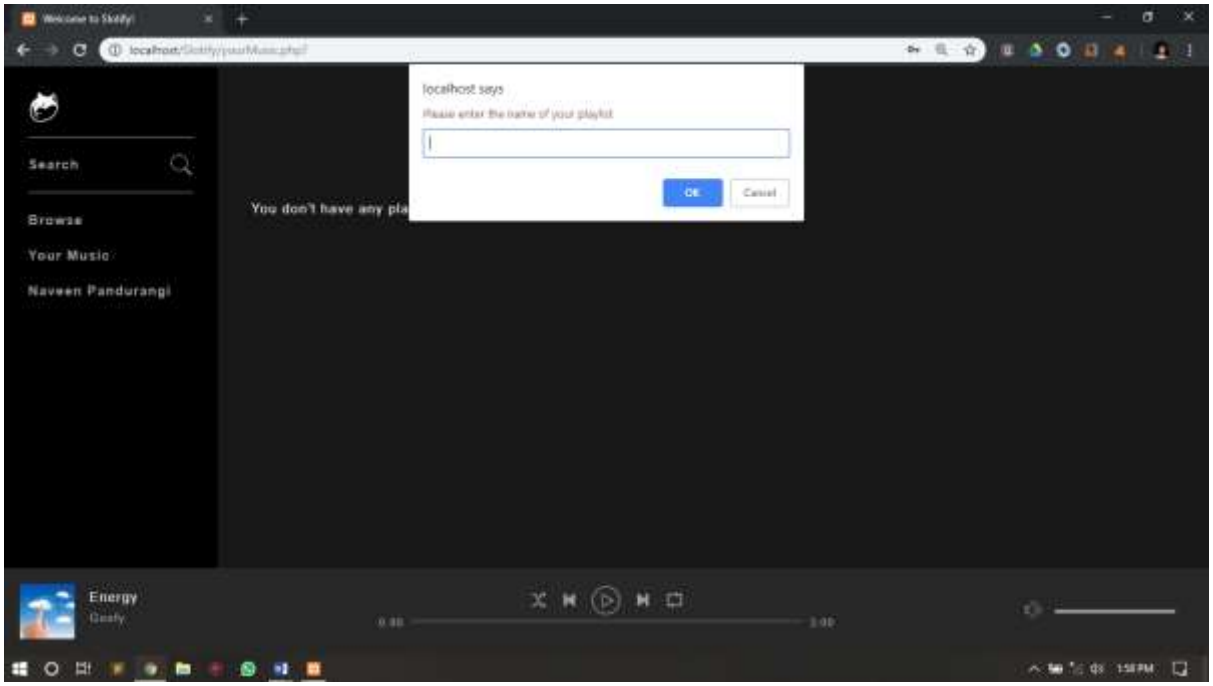

Fig 6.4: Create playlist page

In this page user can create his own personalized playlist

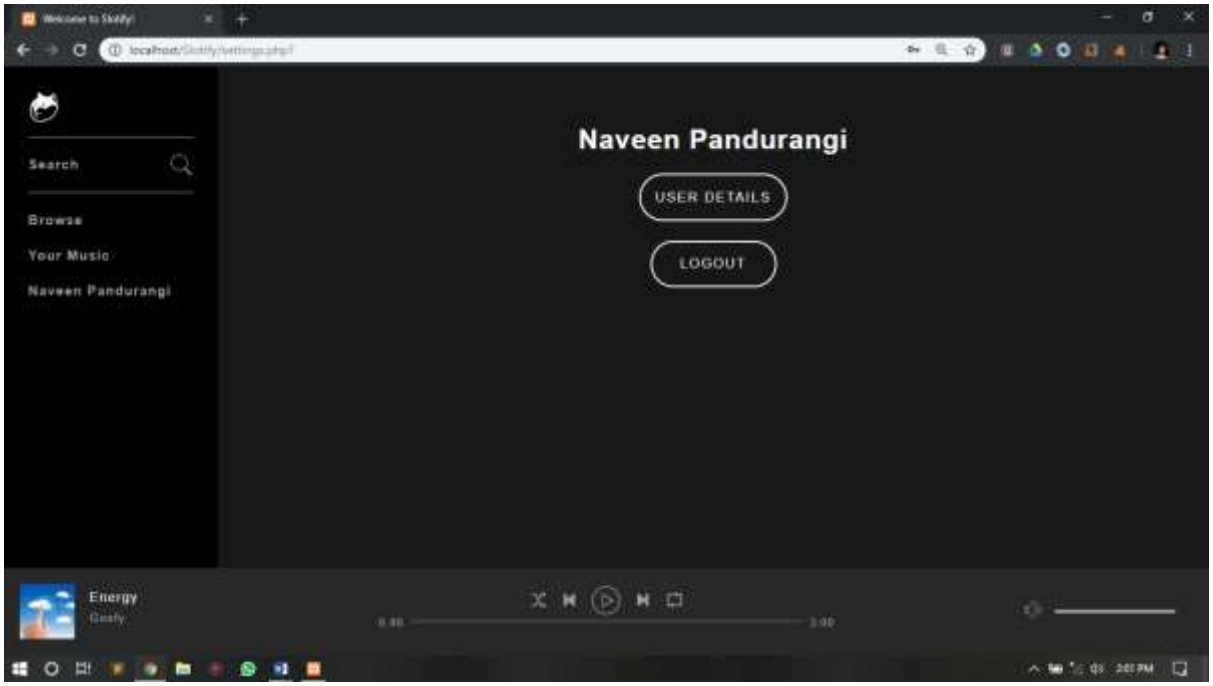

Fig 6.5: GUI page

User can logout or he can view his profile details

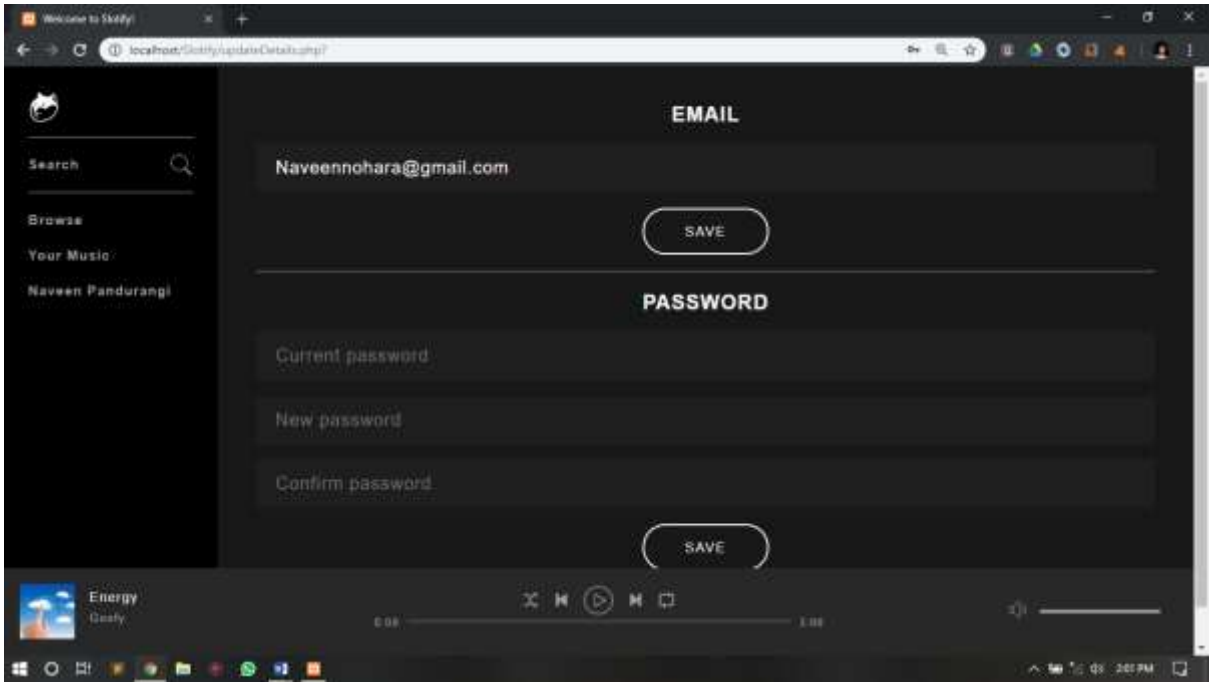

Fig 6.6: Update profile page

A user can update his password and change is email address

Chapter 7

CONCLUSION

To conclude the description about the project, developed using HTML, CSS with MySQL and XAMPP SERVER is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement. The Music Streaming Website is developed for music companies/bands who are apparently seeking to invest in the music streaming industry across the globe which in result to acquire profitable revenue. However, the craze over the music is a perpetual process where the majority of music listeners are constantly are on music applications to enjoy the rhythm in their headphones just within a matter of clicks. Certainly, the growth of music listeners auditory is progressively transforming into Music Consumer Market. This has directed to mushroom some global music application giants like Spotify, Sound Cloud etc. These promising facts are the reasons that tempt every aspiring professional to build a music streaming website/app just alike Spotify. The Website also targets several other audiences who are interested in listening to music and are regular streamers of music. People of any age group can access this website since there are different categories on this site. There are over hundreds of music to choose from, along with different genres of music. The Website is also very user-friendly even people with very less knowledge can use this site without any problems.

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