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TITLE: COMIC CLIQUE

ABSTRACT

In today's technology and fast- growing world with many sources of entertainment, comics have become one of the major sources of entertainment which interests users from a toddler to teenager to an adult. A comic book also called comic magazine or simply comic, is a publication that consists of comic art in the form of sequential panels that represent individual scenes. The characters in comic books are used to express ideas, thoughts and showcase different problems of the world.

From comics being incorporated into movies and television they have become an important part of people's lives. These fictional characters are gaining immense popularity in today's world. These comic characters are unique and possess special abilities which fight problems. Nowadays, these characters have become role models in improving one's lives.

This mini-project is for all comic book fans, and it is a portfolio of comic characters ranging from The Phantom, the first comic character, to Moon Knight, the most recent. This little project is written in HTML, CSS, and Java Script, and it runs in a web browser.

The entire software is written in HTML and CSS, and the web application is run using the Visual Studio CODE IDE.

The mini-project also incorporates AI (Artificial Intelligence) technologies to enhance the experience and is a fun application for people of all ages. It is based on the OpenCV image processing paradigm.

CHAPTER 1

INTRODUCTION

1.1 PROBLEM DEFINITION

This online application is a responsive and interactive interface that provides descriptions of many comic characters from various genres. It has a diverse selection of comics from various writers, publications, and illustrators. This website also offers users the opportunity to search for intriguing information about various cartoon characters. It shows a humorous character's strength, weakness, and other characteristics. It also contains a fun and engaging feature that allows you to find the perfect comedy character for your looks and personality. HTML, JavaScript, CSS, and PHP were used to create this application. It also makes use of a database to keep track of information about the many comic characters as well as login credentials for the website. The user's Google account can be linked to this web application. The user can choose and download wallpapers of his or her favorite characters from the comic they are reading.

1.2 OBJECTIVES

This web application, once completed, will:

• Provide information on all comic characters created by artists.

• Teaching the art of comic book authoring, composition, animation, and creative screenplay writing to children, students, and the general public.

• Provides enjoyment and serves as a stress reliever for individuals of various ages.

• Provides stunning backdrop photographs that can be stored on one's phone, laptop, or tablet, attracting the attention of others.

• Digitizing comic characters and combining them into a single app.

• Featuring work by artists from all over the world.

• To be easily accessible at all times from wherever on the globe.

1.3 METHODOLOGY TO BE FOLLOWED

The main methodology that we follow in this particular project are:

- The creation of tables in the required database for adding information
- Connection of database to the required web application
- The creation of main window and respective sign up and login pages
- The processing of queries from the user and providing output
- Building the model for face recognition
- Adding style decorations to the document.
- Adding of filters and search options for the respective application
- Application to download images from the web application

1.4 EXPECTED OUTCOMES

This web application displays:

- An attractive landing page with options of creating an account or accessing the website
- A sign-up page to collect information like email id, name password and other credentials
- A login page which takes email id and password as input to access the website securely.
- A search bar to display the comic that has been searched and an option to add or remove the particular comic character from the respective account.
- Information about the comic character like strength, weakness, name etc.
- Option to access and download various wallpapers of comic character
- Filter to select out the characters based on genres, popularly viewed or comic book.
- An application which detects the users face and matches to the closet comic character possible.

CHAPTER 2

FUNDAMENTALS OF WEB FRAMEWORKS TECHNOLOGIES

2.1 INTRODUCTION TO THE INTERNET

The Internet is a worldwide communication system that connects thousands of separate networks. It lets data to be exchanged between two or more computers connected to a network. As a result, the internet facilitates the transmission of messages via email, chat, video and audio conferences, and other means. It is now required for everyday tasks such as bill payment, internet shopping and surfing, tutoring, working, and communicating with peers. The Internet was created in 1969 as part of the ARPANET (Advanced Research Projects Agency Network) initiative, which aimed to connect computers at different colleges and the US Defense Department. People from various professions, including engineers, scientists, students, and researchers, began to use the network for exchanging information and messages shortly after. ARPANET, NSFnet, and other private networks interconnected in the 1990s to form the Internet. As a result, the Internet is a worldwide collection of computer networks. It is made up of millions of computing devices that carry and transfer large amounts of data from one to another. The Internet connects desktop computers, mainframes, GPS units, cell phones, auto alarms, and video game consoles.

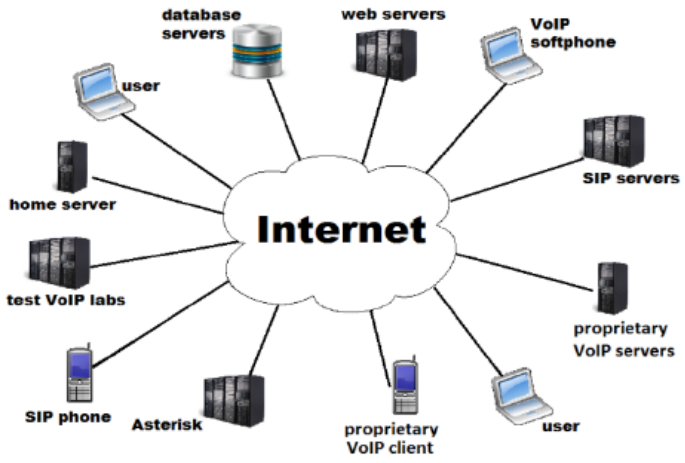

Figure 2.1: Internet

2.2 WORLD WIDE WEB

The World Wide Web (WWWW) or web is an internet-based service that distributes documents across the Internet using a standard set of rules known as protocols. The World Wide Web, sometimes known as a Web, is a collection of websites or web pages maintained on web servers and accessible via the internet by local computers. Text pages, digital photos, audios, and videos, among other things, can be found on these websites. Users can access the content of these sites through the internet using devices such as computers, laptops, and cell phones from anywhere in the globe. The WWW, in conjunction with the internet, allows you to retrieve and display text and media on your device. The World Wide Web is a collection of websites. The World Wide Web, or 'Web,' is a component of the Internet. Web browser software such as Google Chrome, Internet Explorer, Mozilla Firefox, and others are used to access the Internet. Thousands of web pages/websites are uploaded to the WWW every hour using browsers to access digital libraries comprising endless articles, journals, e-books, news, and tutorials stored in the form of web pages on computers across the world called web servers. Tim Berners-Lee, a consultant at CERN (European Organization for Nuclear Research) in Switzerland, invented the Web in 1991. Hyperlinks connect information on the Internet.

Figure 2.2: World Wide Web (WWW)

Difference between Internet and WWW:

Figure 2.1: Difference between Internet and WWW

2.3 WEB BROWSERS

A web browser is a piece of software that allows you to find, access, and view web pages. The term "browser" is commonly used to refer to a web browser. Web browsers are generally used to view and access webpages on the internet, as well as other content written using languages such as HTML and XML (XML). Browsers convert Hypertext Transfer Protocol (HTTP)-delivered web pages and websites into human-readable material. Other protocols and prefixes, such as secure HTTP (HTTPS), File Transfer Protocol (FTP), email processing (mailto:), and files, can also be displayed (file:). Furthermore, most browsers enable external plug-ins that are required to display active content like in-page video, audio, and games. A web browser, in essence, manages HTTP traffic between a client and a server, which is the backbone of World Wide Web usage. URLs are web browser traffic directions, and the browser establishes these connections using IP addresses and other technologies. New types of web

browsers include additional functionality through a variety of plug-ins that can add capabilities after the fact, in addition to aiding web surfing. Some are related to security and accessibility, while others are related to end-user comforts or data aggregation. Explorer, Firefox, Netscape, and Safari are the four most popular web browsers, but there are numerous others.

Figure 2.3: World Browsers

2.4 OPERATION OF WWW

The World Wide Web is based on a client-server model. The steps below will explain how the internet works:

1. The user types the web page's URL (for example, http://www.xyz.com) into the address bar of the web browser.
2. The browser then requests the IP address associated with www.xyz.com from the Domain Name Server.
3. After receiving the IP address, the browser makes a web page request to the web server using the HTTP protocol, which defines how the browser and web server communicate.
4. The web server then receives the request via HTTP protocol and searches for the desired web page. If it is found, it is returned to the web browser and the HTTP

connection is closed. Now, the web browser receives the web page, it interprets it and display the contents of web page in web browser's window.

5. Now the web browser gets the web page, processes it, and displays its contents in the browser's window.

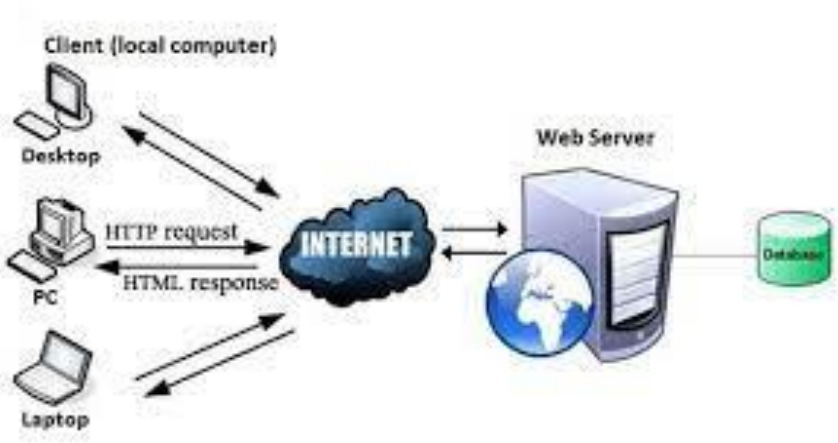

Figure 2.4: WWW Operation

2.5 WEB 2.0

When it comes to describing web 2.0, the word refers to internet apps that allow individuals to share and collaborate while also allowing them to express themselves online. "Web 2.0" refers to the business revolution in the computer industry that has resulted from the shift to the internet as a platform, as well as any attempt to comprehend the rules of success on that new platform. It's essentially a better version of the first global web, marked by the shift from static to dynamic or user-generated content, as well as the rise of social media. Rich web applications, web-oriented architecture, and the social web are all part of the Web 2.0 paradigm. It refers to changes in the way web pages are designed and utilised by people, without any technical changes. Hosted services (Google Maps), Web applications (Google Docs, Flickr), video sharing sites (YouTube), wikis (MediaWiki), blogs (WordPress), social networking (Facebook), folksonomies (Delicious), microblogging (Twitter), podcasting (Podcast Alley), and content hosting services are just a few of the Web 2.0 examples.

Figure 2.5: Web 2.0

2.6 HTML

HTML stands for Hyper Text Markup Language, and it is the most extensively used programming language for creating web pages on the Internet. Berners-Lee devised HTML in late 1991, but the first mainstream HTML specification, "HTML 2.0," was published in 1995. HTML 4.01 was released in late 1999 as a significant version of HTML. Though HTML 4.01 is still extensively used, we now have HTML-5, which is an expansion to HTML 4.01 and was released in 2012. HTML was created with the intention of specifying the structure of texts such as headings, paragraphs, lists, and so on in order to make scientific knowledge more easily shared between researchers. HTML is now commonly used to format web pages using the various tags available in the HTML language. Authors use markup to describe the structure of pages in HTML. The language's elements designate content types such as "paragraph," "list," "table," and so on.

2.7 HTML TAGS

HTML tags are similar to keywords in that they specify how a web browser will format and display text. A web browser can tell the difference between HTML content and plain text using tags. The opening tag, the content tag, and the closing tag are the three basic sections of an HTML tag. Some HTML tags, however, are not closing tags.

Tag	Description
<!--...-->	Defines a comment
<!DOCTYPE>	Defines the document type
<html>	Root of the HTML document
<head>	Contains metadata/information for document
 	Single Line Break
<body>	Document's body
<button>	Defines a clickable button
	Defines a section of a document
<frameset>	Defines a set of frames
<frame>	Defines a window in frameset
<h1>to <h6>	Defines headings
<p>	Defines a paragraph
<img>	Defines an image
<input>	Defines an input control
<pre>	Defines preformatted text
	Defines a section of document
<blockquote>	Defines a section that is quoted from another source

<title>	Defines a title for the document
	Defines an unordered list
	Defines an ordered list
<table>	Defines a table
<td>	Defines a cell in table
<th>	Defines a heading in table
<tr>	Defines a row in table
<link>	Defines the relationship between a document and an external source

2.8 XHTML

EXtensible HyperText Markup Language (XHTML) is an acronym for EXtensible HyperText Markup Language. It's a language that combines HTML and XML. XHTML is nearly identical to HTML, except it is more stringent. HTML that is defined as an XML application is known as XHTML. All major browsers are compatible with it. Although XHTML is nearly identical to HTML, it is more crucial to write good code since XHTML has stricter syntax and case sensitivity than HTML. Unlike HTML, which requires a forgiving HTML-specific parser, XHTML documents are well-formed and may be parsed using ordinary XML parsers. XHTML was created to promote the extensibility of HTML and its interoperability with other data formats. The creation of XHTML was motivated by two key factors:

- It creates a stricter standard for making web pages, reducing incompatibilities between browsers. So, it is compatible for all major browsers.
- It establishes a standard that may be applied to a wide range of devices without modification.

Difference between HTML and XHTML:

HTML	XHTML
HTML stands for Hypertext Markup Language	XHTML stands for Extensible Hypertext Markup Language
It is an SGML application	It is an XML application
Tim Berners-Lee proposed it in 1987	The World Wide Web Consortium recommended it in 2000
HTML is not case sensitive	XHTML is case sensitive
HTML uses a format that is similar to document formats	XHTML uses markup language
HTML can use open tags, such as 	All unclosed tags must be closed in XHTML
HTML is less expressive	XHTML is more expressive as compared to HTML
HTML is not mandatory for a single root element	XHTML documents must contain at least one root element
All content can be included in the body element	All contents must be put in blocks
Attribute values are not significant in HTML	Attribute values are important in XHTML
There is no hard rule on the structure of the elements	The structure of the elements should be followed

Figure 2.2: Difference between HTML and XHTML

2.9 CSS

CSS is a straightforward system for adding style (for example, fonts, colours, and spacing) to Web publications. These sections provide instructions on how to learn and utilise CSS, as well as information on available tools. The CSS working group's news is also included. CSS, or Cascading Style Sheets, is a simple design language designed to make the process of making web pages presentable easier. CSS is a stylesheet language that allows you to separate presentation from content, including layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, allow multiple web pages to share formatting by specifying the relevant CSS in a separate.css file, which reduces complexity and repetition in the structural content, and allow the.css file to be cached to improve page load speed between the pages that share the file and its formatting. The ability to offer the same

markup page in different styles for distinct rendering techniques, such as on-screen, in print, by voice (through speech-based browser or screen reader), and on Braille-based tactile devices, is also made possible by the separation of formatting and content. If the material is accessible on a mobile device, CSS contains rules for different formatting. Cascading gets its name from the priority mechanism used to select which style rule applies when many rules match the same element. This priority-cascading strategy is predictable. The World Wide Web Consortium maintains the CSS specifications (W3C). RFC 2318 specifies the text/css Internet media type (MIME type) for use with CSS (March 1998). For CSS documents, the W3C offers a free CSS validation service. Other markup languages, such as XHTML, plain XML, SVG, and XUL, permit the usage of CSS in addition to HTML.

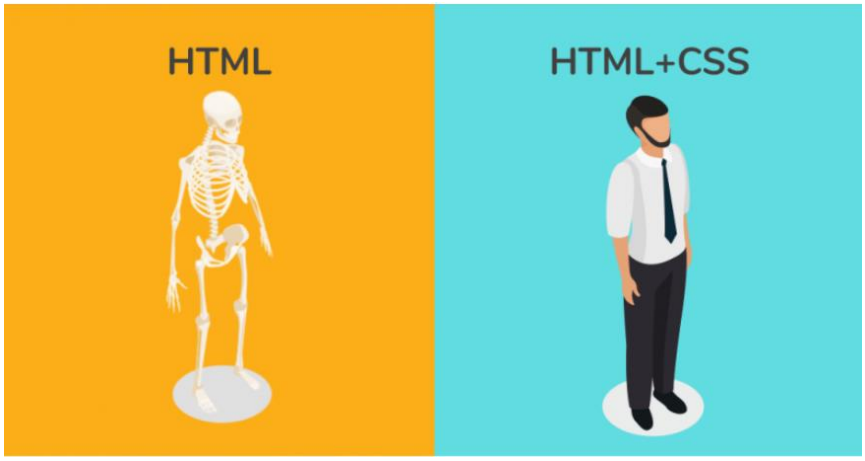

Figure 2.6: CSS

2.10 JAVASCRIPT

JavaScript, abbreviated as JS, is a programming language that, together with HTML and CSS, is one of the essential technologies of the World Wide Web. On the client side, over 97 percent of websites employ JavaScript for web page functionality,] typically incorporating third-party libraries. To run the code on users' devices, all major web browsers have a dedicated JavaScript engine. JavaScript is an ECMAScript-compliant high-level compiled language that is frequently just-in-time. Dynamic Typing, prototype-based object orientation, and first-class functions are all included. It's multi-paradigm, allowing you to

programmed in event-driven, functional, or imperative styles. It contains APIs for working with text, dates, regular expressions, standard data structures, and the Document Object Model, among other things (DOM). It works in tandem with and complements Java. Because JavaScript is interwoven with HTML, it is incredibly simple to use. It's free to use and cross-platform. JavaScript is everywhere; it comes pre-installed on every current web browser, so you don't need to set up any unique environment to study it. JavaScript is supported by Chrome, Mozilla Firefox, Safari, and every other browser you can think of right now.

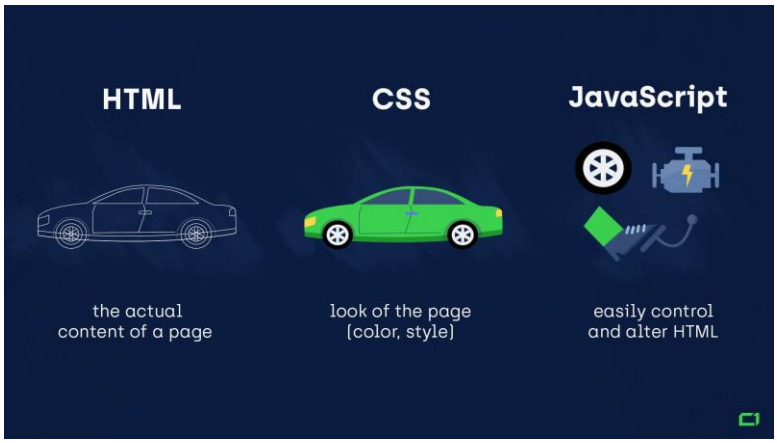

Figure 2.7: JavaScript

Difference between HTML, CSS and JavaScript:

Figure 2.8: Difference between HTML, CSS and JavaScript

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 HARDWARE REQUIREMENTS:

- Processor: Any Processor above 500 MHz
- Processor Speed: 3.2 GHz
- Display Device:14’ to 19’ inch Monitor
- RAM: 512MB (Not a disk intensive program)
- Hard Disk: User Choice (as long as dynamic memory allocation works)
- Operating system: Windows XP/ Windows 7 or above/Linux
- Web camera: 640 X 840 resolution
- Mouse Type: PS2/USB

3.2 SOFTWARE REQUIREMENTS:

- IDE: VS CODE
- Database: Google Firebase
- User Interface: HTML
- Language Used: PHP 5.2
- Software: XAMPP Server
- Web Browser: Mozilla Firefox/ Internet Explorer/Google Chrome
- Programming Language: PHP, JavaScript, CSS, HTML

CHAPTER 4

DESIGN

4.1 PREDICITON MODEL

The face is cartooned in this tiny project, which is a unique feature. Machine learning concepts and OpenCV are used to do this. The user's face is recorded by the web camera as input to this model. OpenCV is used by the web camera to capture the image. OpenCV has optimized machine learning methods and provides a common framework for computer vision applications. It is up to the user to identify, recognize, and produce high-resolution images of an object. NumPy and cv2 are two other libraries that were used. The output depicts the user as a cartoon character.

4.2 WEBSITE STRUCTURE

The website structure of this mini project is as follows:

- The landing page with options of signup, login, favorites, filter and download wallpapers
- It has a scroll bar which enables to search for the comic character
- Displays information about the comic character
- The signup page has information to add like username, password etc.
- The account can also be created by linking it to Gmail
- The login page contains information for the user to input in order to continue into the website.
- There is an option for download wallpapers, which opens to a web page that gives a variety of wallpapers where the user can download and store it into phone or laptop.
- There is an option to make a comic character as favorite. You can favorite it and remove it from favorites. There is a favorite tab which shows the comic characters marked as favorite.

- There is an option where the user can view the account details like email id, password, time and date of login etc.
- There is a web page which gives information about the web page like name, contact details, reviews etc.

CHAPTER 5

IMPLEMENTATION

5.1 MAIN PAGE

```
<!DOCTYPE html>
<html lang="en">

    <head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <!-- Favicon -->
        <link rel="icon" href="logo.png" type="image/gif">
        <!-- Custom stylesheets -->
        <link rel="stylesheet" href="style.css">
        <title>Comic Clique</title>
        <style> main{background-color:url("bg-1.png"); width:"100%"; height:"60%";}</style>
    </head>

    <body>
        <div id="snackbar"></div>
        <!-- NAVIGATION BAR -->
        <header>
            <a href="#">
            <div class="nav-left">
                <img id="logo" src="logo.png" width="50px">
                <div id="logo-text">
                <h1>Comic Clique</h1>
                </div>
            </div>
            </a>
            <div class="nav-right">
            <a href="index.html">
                <div>Home</div>
            </a>
            <a href="favourites.html">
                <div>Favourites</div>
            </a>
            <a href="login_v.html">
                <div>Signup & Login</div>
            </a>
```

```
                <img id="logo" src="logo.png" width="50px">
                <div id="logo-text">
                <h1>Comic Clique</h1>
                </div>
            </div>
            </a>
            <div class="nav-right">
            <a href="index.html">
                <div>Home</div>
            </a>
            <a href="favourites.html">
                <div>Favourites</div>
            </a>
            <a href="login_v.html">
                <div>Signup & Login</div>
            </a>
            </div>
        </header>

        <main>
            <div class="sky" id="animate">
            <img class="superman-fly" height="20%" src="https://i.ibb.co/7jTf81q/superman.png" alt="" />
            </div>
            <div id="search-box" class="input superman">
            <input id="inputName" type="text" name="superheroName" placeholder="Search Me! For e.g., Superman">
            <div id="results">
            </div>
            </div>
        </main>

        <!-- Script files -->

        <script src="index.js"></script>
    </body>

</html>
```

5.2 LOGIN AND SIGNUP PAGE

```
<!DOCTYPE html>

<html>
    <style>
        @import url('https://fonts.googleapis.com/css?family=Poppins:400,500,600,700&display=swap');
        *{
        margin: 0;
        padding: 0;
        box-sizing: border-box;
        font-family: 'Poppins', sans-serif;
        }
        html,body{
        display: grid;
        height: 100%;
        width: 100%;
        place-items: center;
        background: -webkit-linear-gradient(left, yellow,black);
        }
        ::selection{
        background:black;
        color: #fff;
        }
        .wrapper{
        overflow: hidden;
        max-width: 390px;
        background: #fff;
        padding: 30px;
        border-radius: 5px;
        box-shadow: 0px 15px 20px rgba(0,0,0,0.1);
        }
        .wrapper .title-text{
        display: flex;
        width: 200%;
        }
        .wrapper .title{
        width: 50%;
```

```
        color: #fff;
        }
        .wrapper{
        overflow: hidden;
        max-width: 390px;
        background: #fff;
        padding: 30px;
        border-radius: 5px;
        box-shadow: 0px 15px 20px rgba(0,0,0,0.1);
        }
        .wrapper .title-text{
        display: flex;
        width: 200%;
        }
        .wrapper .title{
        width: 50%;
        font-size: 35px;
        font-weight: 600;
        text-align: center;
        transition: all 0.6s cubic-bezier(0.68,-0.55,0.265,1.55);
        }
        .wrapper .slide-controls{
        position: relative;
        display: flex;
        height: 50px;
        width: 100%;
        overflow: hidden;
        margin: 30px 0 10px 0;
        justify-content: space-between;
        border: 1px solid lightgrey;
        border-radius: 5px;
        }
        .slide-controls .slide{
        height: 100%;
        width: 100%;
        color: #fff;
```

```
        </form>
        <form action="#" class="signup">
          <div class="field">
            <input type="text" placeholder="Email Address" required>
          </div>
          <div class="field">
            <input type="password" placeholder="Password" required>
          </div>
          <div class="field">
            <input type="password" placeholder="Confirm password" required>
          </div>
          <div class="field btn">
            <div class="btn-layer"></div>
            <input type="submit" value="Signup">
          </div>
        </form>
      </div>
    </div>
  </div>
  <script>
    const loginText = document.querySelector(".title-text .login");
    const loginForm = document.querySelector("form.login");
    const loginBtn = document.querySelector("label.login");
    const signupBtn = document.querySelector("label.signup");
    const signupLink = document.querySelector("form .signup-link a");
    signupBtn.onclick = (()=>{
    loginForm.style.marginLeft = "-50%";
    loginText.style.marginLeft = "-50%";});
    loginBtn.onclick = (()=>{
      loginForm.style.marginLeft = "0%";
      loginText.style.marginLeft = "0%";});
    signupLink.onclick = (()=>{
    signupBtn.click();
    return false;
    });
  </script>
```

5.3 FAVOURITES PAGE

```
<!DOCTYPE html>
<html lang="en">

    <head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>My Favourites</title>

        <!-- Favicon -->
        <link rel="icon" href="assets/logo.png" type="image/gif">

        <!-- Loading stylesheets -->
        <link rel="stylesheet" href="./styles/style.css">

        <!-- Font Awesome icons -->
        <script src="https://kit.fontawesome.com/761d42c757.js" crossorigin="anonymous"></script>

        <title>Comic Clique</title>
    </head>

    <body>
        <div id="snackbar"></div>
        <!-- NAVIGATION BAR -->
        <header>
            <a href="index.html">
                <div class="nav-left">
                    <img id="logo" src="assets/logo.png" width="50px">
                    <div id="logo-text">
                        <h1>Comic Clique</h1>
                    </div>
                </div>
            </a>
            <div class="nav-right">
                <a href="index.html">
                    <div>Home</div>
                </a>
```

```
    </head>

    <body>
        <div id="snackbar"></div>
        <!-- NAVIGATION BAR -->
        <header>
            <a href="index.html">
                <div class="nav-left">
                    <img id="logo" src="assets/logo.png" width="50px">
                    <div id="logo-text">
                        <h1>Comic Clique</h1>
                    </div>
                </div>
            </a>
            <div class="nav-right">
                <a href="index.html">
                    <div>Home</div>
                </a>
                <a href="favourites.html">
                    <div>Favourites</div>
                </a>
            </div>
        </header>

        <main style="overflow-y: hidden;">
            <div id="fav-card">
            </div>
        </main>

        <script src="favourites.js"></script>
    </body>

</html>
```

5.4 DETAILS PAGE

```
<!DOCTYPE html>
<html lang="en">

    <head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">

        <!-- Favicon -->
        <link rel="icon" href="assets/logo.png" type="image/gif">

        <!-- Loading stylesheets -->
        <link rel="stylesheet" href="./styles/style.css">

        <!-- Font Awesome icons -->
        <script src="https://kit.fontawesome.com/761d42c757.js" crossorigin="anonymous"></script>

        <title>Superheroes</title>
    </head>

    <body>
        <div id="snackbar"></div>
        <!-- NAVIGATION BAR -->
        <header>
            <a href="index.html">
                <div class="nav-left">
                    <img id="logo" src="assets/logo.png" width="50px">
                    <div id="logo-text">
                        <h1>Comic Clique</h1>
                    </div>
                </div>
            </a>
            <div class="nav-right">
                <a href="index.html">
                    <div>Home</div>
                </a>
                <a href="favourites.html">
```

```
                    <div class="detail">
                        <div class="info-title">Weight</div>
                        <div id="weight" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Eye color</div>
                        <div id="eye-color" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Hair color</div>
                        <div id="hair-color" class="info-content"></div>
                    </div>
                </div>

                <div id="biography" class="superheroInfo">
                    <h1 style="color: crimson;">Biography</h1>
                    <div class="detail">
                        <div class="info-title">Full name</div>
                        <div id="full-name" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Place of birth</div>
                        <div id="place-of-birth" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">First appearance</div>
                        <div id="first-appearance" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Publisher</div>
                        <div id="publisher" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Alignment</div>
                        <div id="alignment" class="info-content"></div>
```

```
                        <div id="occupation" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Base</div>
                        <div id="base" class="info-content"></div>
                    </div>
                </div>

                <div id="connections" class="superheroInfo">
                    <h1 style="color: crimson;">Connections</h1>
                    <div class="detail">
                        <div class="info-title">Relatives</div>
                        <div id="relatives" class="info-content"></div>
                    </div>
                    <div class="detail">
                        <div class="info-title">Group affiliations</div>
                        <div id="group-affiliation" class="info-content"></div>
                    </div>
                </div>

            </div>
        </div>
    </main>

    <script src="details.js"></script>
</body>

</html>
```

CHAPTER 6

RESULTS

6.1 Main Page

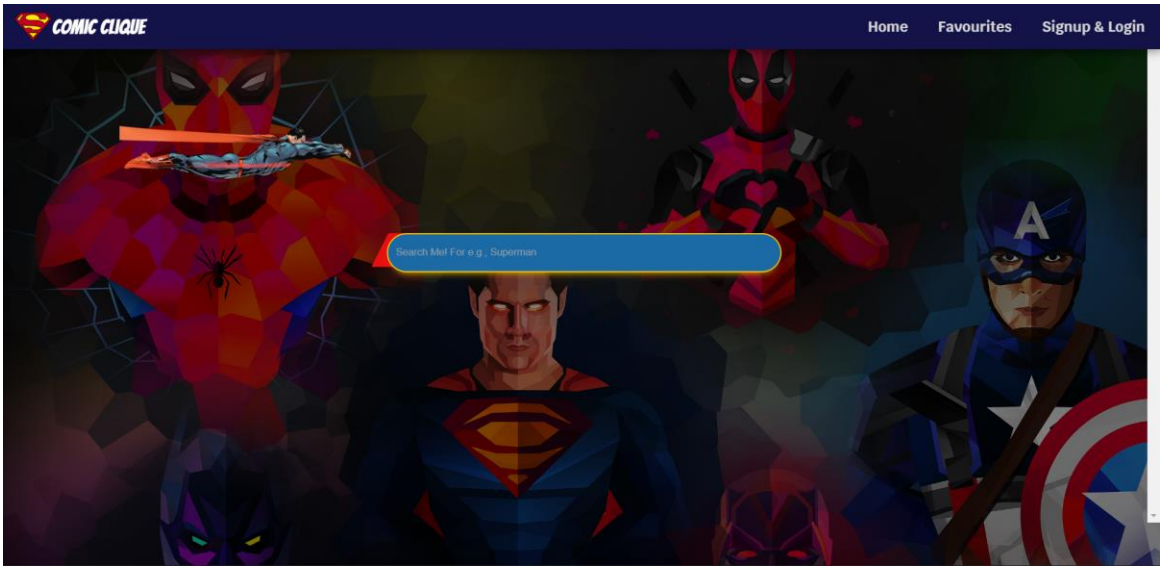

Figure 6.1: Main Page

6.2 Login Page

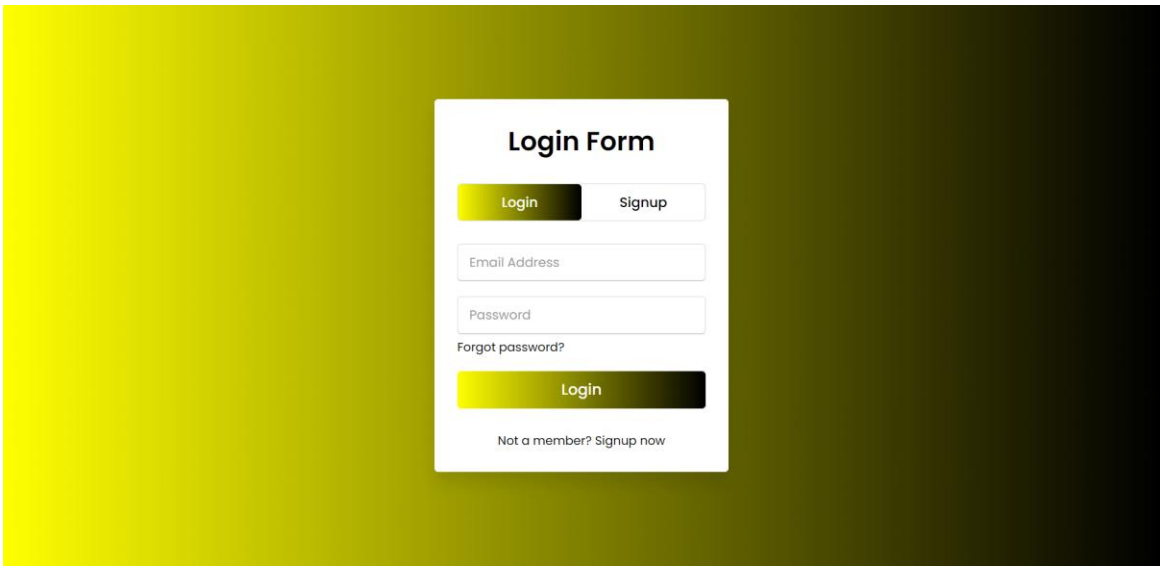

Figure 6.2: Login Page

6.3 Signup Page

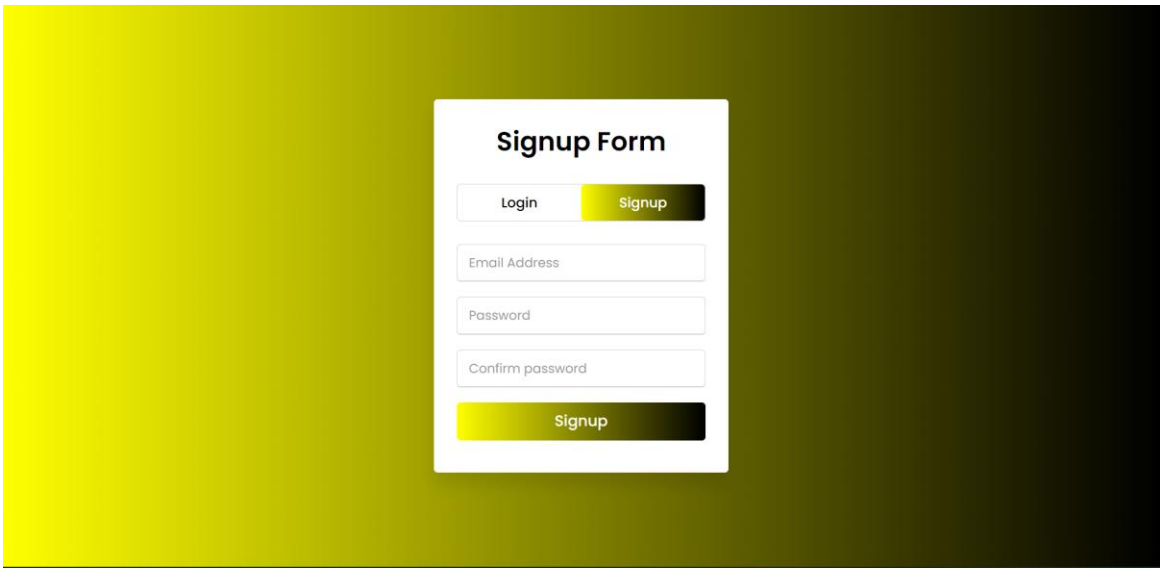

Figure 6.3: Signup Page

6.4 Favorites Page

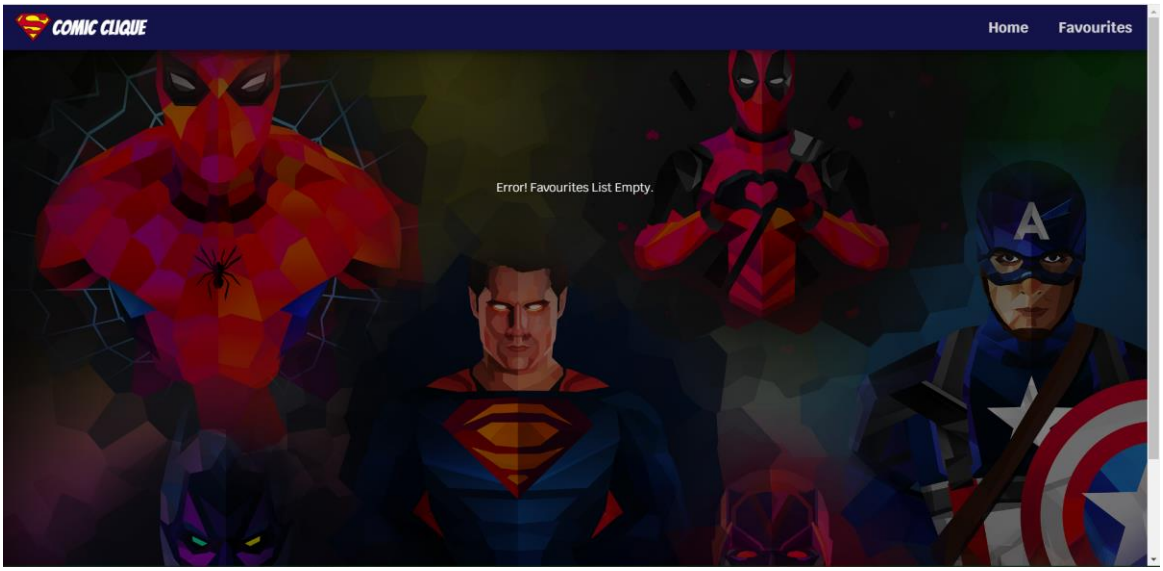

Figure 6.3: Favorites Page

CHAPTER 9

CONCLUSION

The mini project met the aims and design goals outlined in the report's objectives and design sections. The machine learning model has been implemented successfully. This webpage is easily accessible from any web browser. This mini-project has been uploaded to the internet and can be accessed at any time and from any location. This little project was designed to be a fun, educational, and amusing experience. This project allows users to collect all information about various comic characters and piques their curiosity in possibly creating their own comic. It also demonstrates how Machine Learning may be used to generate engaging models for people all across the internet. This mini project also encourages for users to learn web frameworks and create their own personalized websites and attach corresponding style sheets. This min project encourages the creativity skills and is a website for releasing stress and a source of entertainment. Users are encouraged to study web frameworks and construct their own personalised websites with accompanying style sheets as part of this little project. This mini project promotes creativity while also serving as a stress reliever and source of fun.

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[6] https://opencv.org/