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Abstract

Details regarding the overview, terms, user stories, and design approaches for the Heroes and Villains Full Stack Web Application

Heroes and villains

Technical Design

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1. Overview

Due to the rising popularity of superhero movies, there has been a heightened awareness of superheroes in our midst. In result, the amount of superhero and supervillain sightings is increasing at an alarming rate. The Hero Education and Relationship Organization (HERO) has asked us to develop a full stack web application that will allow users to look up and log any sightings in their area. This is a pivotal time to become the pioneer of Super sighting application development.

1. Terms and Definitions
   1. **Technical Terms**

**-** *Entity Relational Diagram (ERD):* A diagram showcasing the layout of how the data will be stored in the database.  
*- Wireframe:* A high-level design of how the web pages will be displayed.  
- *Full Stack Web Application*: An application that consists of a client software(front-end) and server software (back-end)

**-** *CRUD:* A type of application that generally let’s users create, read, update and delete (CRUD) an entity.  
- *MySQL:* A database management system that will be used to create the database for this project.   
- *Java:* The programming language that will be used to host the server that communicates between the front-end (web-client) and the back-end (SQL database).  
- *Javascript*: Web-based programming language. Will be used to manipulate data and HTML/CSS features.  
- *HTML: The standard markup language for Web pages.  
- CSS:* Describes how HTML elements are to be displayed.  
- *Bootstrap:* CSS framework that will be used to create responsive web-app experience.

* 1. **Audience Roles***- User:* Represents the person who will be using the web application. The user will be able to navigate and interact with the information on the screen.
  2. **Data Entities***- Super:* Consists of either a superhero or supervillain. Supers have a name, description, power(s), and organization(s) they are a part of.  
     -*Power:* A power is a single or set of abilities that make someone a super (e.g. flying). Powers have a name and description and can be associated to more than one super.  
     - *Location:* A place where a super has been once sighted. A location has a name, description, address, and longitude/latitude coordinates.  
     - *Sighting:* A combination of a super at a location at a particular time.

1. ERD

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1. Wireframes

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1. User Story

|  |  |  |
| --- | --- | --- |
| ID | Story | Weight |
| 1 | As a user, I want to **add supers** in the system. | 3 |
| 2 | As a user, I want to **view all supers** in the system. | 3 |
| 3 | As a user, I want to **edit supers** in the system. | 5 |
| 4 | As a user, I want to **delete supers** in the system. | 5 |
| 5 | As a user, I want to **add powers** in the system. | 3 |
| 6 | As a user, I want to **view all powers** in the system. | 3 |
| 7 | As a user, I want to **edit powers** in the system. | 5 |
| 8 | As a user, I want to **delete locations** in the system. | 5 |
| 9 | As a user, I want to **add locations** in the system. | 3 |
| 10 | As a user, I want to **view all locations** in the system. | 3 |
| 11 | As a user, I want to **edit locations** in the system. | 5 |
| 12 | As a user, I want to **delete locations** in the system. | 5 |
| 13 | As a user, I want to **add organizations** in the system. | 3 |
| 14 | As a user, I want to **view all organizations** in the system. | 3 |
| 15 | As a user, I want to **edit organizations** in the system. | 5 |
| 16 | As a user, I want to **delete organizations** in the system. | 5 |
| 17 | As a user, I want to **add sightings** in the system. | 3 |
| 18 | As a user, I want to **view all sightings** in the system. | 3 |
| 19 | As a user, I want to **edit sightings** in the system. | 5 |
| 20 | As a user, I want to **delete sightings** in the system. | 5 |
| 21 | As a user, I want to see a newsfeed of the latest 10 sightings. | 5 |
| 22 | As a user, I want to see general info about the application on the homepage. | 1 |
| 23 | As a user, I want to view all superheroes/villains sighted at a particular location. | 8 |
| 24 | As a user, I want view all locations where a particular super has been seen. | 5 |
| 25 | As a user, I want to view all sightings for a particular date. | 8 |
| 26 | As a user, I want to view all members of a particular organization. | 8 |
| 27 | As a user, I want to view all of the organizations a particular super belongs to. | 8 |

1. High Level Test Plan

The back end will be given a series of tests to determine that all CRUD functionalities are doing as expected.