**Javascript Test**

**TEST NAME: Superhero Hunter JS**

**Problem statement**

Create a superhero hunter app. Use ONLY vanilla javascript, no libraries or frameworks are allowed for Javascript (you can use any CSS framework like Bootstrap).

**Instructions**

* Use the Marvel API: <https://developer.marvel.com/docs>
* Register yourself to the above website <https://developer.marvel.com/signup> and generate the public and private key.
* Now follow the instruction on how to use the API key <https://developer.marvel.com/documentation/authorization>. You need to use the timestamp as **ts** and then create the hash using **md5 hash of ts**, private-key and public-key.   
  How to generate md5 hash?

| // first install crypto-js  **npm install crypto-js**  // now use md5 as below  **var MD5 = require("crypto-js/md5");**  **console.log(MD5("text to hash").toString());** |
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* Make sure to use the right API URL else it will give you a CORS error.
* You are **ALLOWED** to style the app any way you like.
* You are **ALLOWED** to google and read how to approach the problem.
* **DO NOT** copy and paste code from the internet.
* **DO NOT** cheat with other students. ***REMEMBER:*** *These tests are for YOU so that you can learn something new. Cheating won’t help. It’s better to not submit the solution than to cheat and submit. PS: There will be a plagiarism check and when found cheating, you won’t be allowed to give future tests.*
* Once you have finished with the test, make a video recording your computer screen (via phone or software like OBS/screencastify, etc) and **explaining how you have approached the problem** in code **and showing the final product**. The video can be **UPTO 5 mins** long. ***Please don’t record videos longer than that.***
* **Upload** and **Host** the code on github as well.
* Once you have recorded the video, upload it on youtube (unlisted or whatever), drive or wherever you want to upload it.
* Hosting on Github is compulsory, I will be rejecting the submission if not hosted!

**Features *(No need for extra features, just make the listed features)***

* Home Page
  + Fetch and display a list of SuperHeros (Characters) on the home page. Also create a search bar that will filter out the character based on search query. Suppose I type “bat” in the search box, it should show “batman”.   
    [ API example https://gateway.marvel.com:443/v1/public/characters?ts=<time-stamp>&apikey=<public-key>&hash=<md5(ts+privateKey+publicKey)>]
  + Each search result of the superhero should have a favorite button, clicking on which superhero should be added to “My favorite superheroes” (a list).
  + On clicking any particular search result (any superhero), open a new page with more information about that superhero (Superhero page).
* Superhero Page
  + Should show a lot of information about the superhero like their name, photo, bio and other information provided by the API (comics, events, series, stories, etc).
* My favourite superheroes Page
  + Display a list of all the favourite superheroes.
  + Make this list persistent (should have the same number of superheroes before and after closing the browser).
  + Remove from favourites button: Each superhero should have remove from favourites button, clicking on which should remove that superhero from the list.

**Points on which the project will be judged**

* All functionalities mentioned above
* Github
  + Readme.md file
  + Hosted code on Github
* Code
  + Comments
  + Structuring of code
  + Indentation
  + Variables and functions naming
* Styling
* Design
* Video (explanation about the project)
* Creativity