

**Project Design Phase - II**  
**Solution Requirements**  
**(Functional & Non-functional)**

Date	15 October 2022
Team ID	PNT2022TMID16280
Project Name	Containment Zone Alerting Application
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR - 1	User Registration	Registration through Gmail by entering the details of username, password and E-mail ID.
FR - 2	User Confirmation	Confirmation via Email
FR - 3	Building of Model	Training and Testing of the model using IBM Watson.
FR - 4	Deployment of Model	The trained model needs to be deployed on the IBM Cloud for analysis with the backend.
FR - 5	Zone prediction	The prediction model is called using API to the backend developed with Flask for analysis of the containment zone.
FR - 6	Development of the product	The frontend is to be designed with HTML, CSS and JS and the backend to be Flask and the data is called from the Cloud using the API URL.
FR - 7	Collecting the dataset	The datasets necessary for the development of the model is taken in the form of csv file from the internet.
FR - 8	Environmental Setup	The users will be made to have the basic requirements necessary to view the website on the devices.

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR - 1	Usability	<p>The website must be accessed by the admin and the customer without any problems.</p> <p>The design of the UI needs to be simple and easy to use for the admin to monitor the working process and for user to search the location and prediction details.</p>

NFR - 2	<b>Security</b>	<p>The user details entered in the website have to be secure that they are not visible to other users.</p> <p>Cybersecurity teams (for example: Red Scan) has to be made a collaboration to increase the security of the website.</p> <p>The attack from external sources as Trojan Horse, DOS Attacks from the user side have to take steps to prevent them.</p>
NFR - 3	<b>Reliability</b>	<p>The website will not be enforcing for the registration for the users to use the web portal.</p> <p>If the predictions made by the website is not accurate or to the expectations of user, they can contact the administrator team and make a complaint.</p>
NFR - 4	<b>Performance</b>	<p>The website needs to be loaded within a time period of 3 to 5 seconds. This is the highest expectancy from the users of the web portal.</p> <p>There needs to be backup server so that the if one fails due to power failure or any damages then the website should not be in a situation of not functionality.</p> <p>The website needs to be having the same specification of the look and feel in both laptop / desktop and mobile phones.</p> <p>The website should be opened even the specifications of the device is not up to the mark for operating, that is having minimum storage or RAM capacity or processor.</p>
NFR - 5	<b>Availability</b>	<p>The portal should be able to access a 24 / 7 for the users to use the website.</p> <p>With the help of SEO, the website will be made to stay on the top of the search list for university prediction to make customers take a view at the first sight of search.</p> <p>If a registered user, types in the incorrect password and requests for the change of password then the response of sending the link for retype of password needs to frequent so that the delay of customer is reduced.</p> <p>Customer help care needs to be active at all the times so that the user can contact and inform about the problems that are arising while using the portal.</p>
NFR - 6	<b>Scalability</b>	<p>The minimum requirement for a desktop / laptop to function with the website is that (4GB RAM, 128 SSD and i3 Intel Processor). To have a smoother and uninterrupted experience a higher specification than that is expected to have by the users.</p>

		The website is standardized in a way that it will be supported by any of the computer operating systems and mobile operating systems.
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