Project Design Phase - II

Solution Requirements

(Functional & Non-functional)

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| 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.

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| **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.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR - 1 | **Usability** | The website must be accessed by the admin and the  customer without any problems.  The design of the UI needs to simple and easy to use  for the admin to monitor the working process and for  user to search the location and prediction details. |
| NFR - 2 | **Security** | The user details entered in the website have to be  secure that they are not visible to other users.  Cybersecurity teams (for example: Red Scan) has to  be made a collaboration to increase the security of the  website.  The attack from external sources as Trojan Horse,  DOS Attacks from the user side have to take steps to  prevent them. |
| NFR - 3 | **Reliability** | The website will not be enforcing for the registration  for the users to use the web portal.  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. |
| NFR - 4 | **Performance** | 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.  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.  The website needs to be having the same specification  of the look and feel in both laptop / desktop and  mobile phones.  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. |
| NFR - 5 | **Availability** | The portal should be able to access a 24 / 7 for the  users to use the website.  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.  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.  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. |
| NFR - 6 | **Scalability** | 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  uninterruptable experience a higher specification than  that is expected to have by the users.  The website is standardized in a way that it will be  supported by any of the computer operating systems and  mobile operating systems. |