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|  | **Department of Computer Science**  **University of Management and Technology** |

**Assignment Description File**

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| Course Name: | **Software Engineering** |
| Section: | **V1, V2, V3** |
| Teacher: | **Fasiha Ashraf** |
| Student Name n ID | Syed Ali Jawad Bukhari F2019266282  Muhammad Haris F2019266084  Asma Butt F2018266096  Saad Atif F2019266100 |
| Assignment No.: | 4 |
| Project Title | YourGuide.city |

**NOTE: PLAGIARISED ASSIGNMENT EITHER FROM CLASSMATES OR INTERNET WILL BE MARKED STRAIGHT ZERO.NO ASSIGNMENT WILL BE ACCEPTED AFTER DEADLINE.ALWAYS MENTION SECTION ON ASSIGNMENT**

**FOLLOW THE TEMPLATE ATTACHED**

**Assignment Description:**

**Q1:** Write all functional requirements of your project.

**Q2:** Write all the non-functional requirements of your project.

**Submission Guidelines:**

Submit Softcopy on LMS.

Prefer to present in Table format

**SEE THE TEMPLATE ATTACHED**

# System Functions/ Functional Requirements

This section is can be skipped, if Requirement Specifications document has been developed for the project. Otherwise this section is mandatory.

This section may contain

* end user, operator, support, or integration functions,
* performance requirements,
* design constraints,
* programming language, and
* interface requirements.

System functions are descriptions of what a system is supposed to do. They should be identified and listed in logical cohesive groups, with their category (priority) assigned. These system functions will be identified as a result of the requirement gathering process conducted with the client. However, in some cases, prior to the development of the Functional Specifications the requirements may already have been listed in a document: if this is so then a reference to the document may suffice.

To verify that some **X** is indeed a system function; it should make sense in the following sentence:

The system should do <**X**>

The table below gives an example of how system functions can be listed:

* The Functions column gives a brief one-line description of the required functionality.
* The Category column refers to the status of the functionality for the proposed system. The options for the Category are defined below.
* The Attribute column defines the system characteristics. The Details and Constraints column specifies the conditions within which the attribute is applicable. Section 1.12 defines the default Attributes and the related Constraints. In case, the default conditions are to be over-ridden then the conditions can be defined in this table.

Function Categories

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| --- | --- |
| **Function Category** | **Meaning** |
| Evident | Should perform, and user should be cognizant that it is performed. |
| Hidden | Should perform, but not be visible to users. This is true of many underlying technical services, such as save information in a persistent storage mechanism. Hidden functions are often missed during the requirements gathering process. |
| Frill | Optional; adding it does not significantly affect cost or other functions. |

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| --- | --- | --- | --- | --- |
| Ref # | Functions | Category | Attribute | Details & Boundary Constraints |
| FR1.1 | Search a City Name | Evident |  | Search a City Name to see Posts of Restaurants and Food Shops Uploaded by Others Everyone can search |
| FR2.1 | Open a Post | Evident |  | Post Detail (i.e. Place Name, Desc, Ratings) will be showed when user will click on a post  Everyone can access posts content |
| FR2.2 | Like a Post | Evident |  | User can like a Post so that visitors can judge the food quality of a restaurant  This functionality will be enabled for registered users only |
| FR2.3 | Dislike a Post | Evident |  | User can dislike a Post so that visitors can judge the food quality of a restaurant  This functionality will be enabled for registered users only |
| FR2.4 | Comment a Post | Evident |  | Users can comment a Post about a Restaurant/Food Shop  This functionality will be enabled for registered users only |
| FR3.1 | Upload Images | Evident |  | User can upload a post (i.e. Images, Description about a Food Shop)  This functionality will be enabled for registered users only |
| FR4.1 | User Registration | Evident |  | User can Sign Up and make account. He can upload content |
| FR5.1 | Content Display | Evident |  | System will display all the content in the form posts so that users can see the posts. |
| **Ref #** | **Quality Attributes (NFR)** | **Category** |  | **Details and Boundary Constraints** |
| NFR1.1 | Friendly UI | Mandatory |  | Website will be User-Friendly and Easy-to-Use to make site visitors stay on the website |
| NFR2.1 | Compatibility | Mandatory |  | Website will be compatible for a variety of browsers and platforms. It’s important to provide ease to End-Users on any device. |
| NFR3.1 | SEO Optimized | Mandatory |  | Website should be SEO optimized to increase traffic and to reach target audience |
| NFR4.1 | Security | Mandatory |  | The Data/Content/Information will be protected. So that unauthorized person cannot access/modify them |
| NFR4.2 | Authentication | Mandatory |  | System will make sure authentication of each registered user |
| NFR5.1 | Data Integrity | Mandatory |  |  |
| NFR6.1 | Accessibility | Mandatory |  | Website will be easily and quickly findable and available for internet users |

System Attributes/ Nonfunctional Requirements

System attributes are nonfunctional system qualities – such as ease of use. System attributes are characteristics of the system; they are not functions.

System attributes have a possible set of Attribute Details, which tend to be discrete, fuzzy, symbolic values of the attribute, such as:

response time = psychologically appropriate

interface metaphor = graphical, browser-based

Some system attributes may also have Attribute Boundary Constraints, which are mandatory boundary conditions, usually on a numeric range of values of an attribute, such as:

response time = five seconds maximum

In this section the Category column indicates whether or not the attribute is critical for the operation of the system.

The Category can take two options:

* Optional
* Mandatory

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| --- | --- | --- |
| Attribute | Details and Boundary Constraints | Category |
| *Response time* | *(Boundary constraint) When recording a sold item, the description and price will appear within 5 seconds* | *Optional* |
| *Concurrent User Load* | *A minimum of 10 users connected simultaneously* | *Mandatory* |

## Non-Functional Requirements