

Project Assignment – Use-Case Analysis

Team: HAcK

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Use Cases:

| Use-Case ID | Description |
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| 1 | <p>Use Case: Create Account [createAccount] Description: User wants to create an account for either Developing or Consuming applications Actor – Generic User Precondition: None Steps: Basic Path: Actor Actions: User enters all the required fields and submits the form System Responses: New user account created Alternate paths: Actor Actions: User submits account information which already exist System Responses: Error saying Account already exists Actor Actions: User submits the form without entering all required fields System Responses: Error message is displayed asking user to enter all required fields</p> |
| 2 | <p>Use Case: Login into Application [loginApplication] Description: User wants to login into the application to access the account details Actor: Generic User Precondition: User should have an account Steps: Basic Path: Actor Actions: User enters login credentials and submits System Responses: Provides access to the user account Alternate paths: Actor Actions: User enters invalid login credentials System Responses: Displays error message to re-enter the login details</p> |
| 3 | <p>Use Case: Create an application [createApplication] Description: AppDeveloper creates a new application by providing the name, and the API service to be used Actor: AppDeveloper Precondition: AppDeveloper should be authenticated Steps: Basic Paths: Actor Actions: AppDeveloper enters all the required information and submits the form System Responses: New application is created Alternate paths: Actor Actions: AppDeveloper submits the form without entering all the required fields System Responses: Error message is displayed asking user to enter all required fields</p> |

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| 4 | <p>Use Case: Delete an application [deleteApplication]</p> <p>Description: AppDeveloper deletes the application which in turn deletes all the created parameters and notifies all the AppConsumers that the application has been deleted by the AppDeveloper</p> <p>Actor: AppDeveloper</p> <p>Precondition:</p> <p>Steps: AppDeveloper is authenticated and the applications exists</p> <p>Basic Path:</p> <p>Actor Actions: AppDeveloper clicks the delete button within an application</p> <p>System Response: Deletes the application and a notification is sent to all AppConsumers saying the Application has been deleted from the AppStore</p> <p>Alternate paths:</p> <p>Actor Actions: None</p> <p>System Responses: None</p> |
| 5 | <p>Use Case: Modify an application [editApplication]</p> <p>Description: AppDeveloper modifies the application by changing the information like name, category and the API service used</p> <p>Actor: AppDeveloper</p> <p>Precondition: AppDeveloper is authenticated and the application exists</p> <p>Steps:</p> <p>Basic Paths:</p> <p>Actor Actions: AppDeveloper edits the application and submits the details</p> <p>System Response: Changes are saved</p> <p>Alternate paths:</p> <p>Actor Actions: AppDeveloper submits the changes with some incorrect or missing information</p> <p>System Response: Error message is displayed asking the AppDeveloper to correct the details and resubmit</p> |
| 6 | <p>Use Case: View an application [viewApplication]</p> <p>Description: AppDeveloper wants to view an application which they have already created</p> <p>Actor: AppDeveloper</p> <p>Precondition: Application exists and AppDeveloper is authenticated</p> <p>Steps:</p> <p>Basic Paths:</p> <p>Actor Actions: AppDeveloper submits the application name</p> <p>System Response: Application detail is displayed</p> <p>Alternate paths:</p> <p>Actor Actions: AppDeveloper submits application name that does not exist</p> <p>System Response: Error message is displayed saying application does not exist</p> |
| 7 | <p>Use Case: Adds Parameter to Application [addParameter]</p> <p>Description: When creating an Application, after informing about the usage of the API, the developer needs to consider adding which parameters will be appended to the API URL. These parameters are divided into 2 parts i.e. Path Parameters and Query Parameters. The Path Parameters will be appended to the API URL and will not be shown to the User consuming on the other hand for Query Parameters will be appended for filtering the request and these attributes will be retrieved from User which will be requested by displaying its more suitable Labels.</p> <p>Actor – AppDeveloper</p> <p>Precondition: API URL already added, AppDeveloper authenticated</p> <p>Steps:</p> |

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| | <p>Basic Paths: Actor Actions: The AppDeveloper provides all the required information in the fields and clicks submit. System Response: A new parameter is appended to the application.</p> <p>Alternate paths: Actor Actions: The AppDeveloper fails to provide all the required information in the fields and clicks submit. System Response: An Error message is displayed to fill all required information and the AppDeveloper must complete the information to proceed.</p> |
| 8 | <p>Use Case: Modify application parameters [modifyParameter] Description: The process allows the AppDeveloper to update/modify the parameter associated with the API service Actor – AppDeveloper Precondition: Parameter added previously and not deleted before modification, AppDeveloper authenticated Steps: Basic Path: Actor Actions: The AppDeveloper edits at least one field which is supported by values of other fields like the field type or sample value System Response: The parameter is updated in the Application Alternate paths: Actor Actions: The AppDeveloper edits at least one field which would contradict the associated value in another field like the field type or sample value. System Response: Error message is associated where it asks to edit particular fields which are conflicting.</p> |
| 9 | <p>Use Case: Delete application parameters [deleteParameter] Description: The process allows to delete any of the Application Parameters Actor – AppDeveloper Precondition: Parameter added, AppDeveloper authenticated Steps: Actor Actions: The AppDeveloper selects the parameter to be deleted System Response: The Parameter is deleted from the application Alternate paths: Actor Actions: None System Response: None</p> |
| 10 | <p>Use Case: Create New Service [createService] Description: The process allows the AppDeveloper to add a new service which is not present in the provided list of services Actor – AppDeveloper Precondition: Service not previously present in list, AppDeveloper authenticated Steps: Actor Actions: The AppDeveloper enters all the required information to create another service. System Response: The service is appended in the list of selecting an application. Alternate paths: Actor Actions: AppDeveloper enters details of new service which already exists System Response: Error message shown saying service already exist</p> |
| 11 | <p>Use Case: Configure application result [configureApplication]</p> |

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| | <p>Description: The process allows configuring the output displayed to the user according to the attributes obtained from the JSON.</p> <p>Actor – AppDeveloper</p> <p>Precondition: JSON available, API service up and running, User authenticated</p> <p>Steps:</p> <p>Actor Actions: The AppDeveloper configures the application result on the basis of JSON given</p> <p>System Response: The configuration is stored to be utilized when the User has consumed</p> <p>Alternate paths:</p> <p>Actor Actions: AppDeveloper configures the application now accepted by the system</p> <p>System Response: Error message is displayed to correct the configuration</p> |
| 12 | <p>Use Case: Publish Application [publishApplication]</p> <p>Description: The process allows the AppDeveloper to publish the Application on the AppStore</p> <p>Actor – AppDeveloper</p> <p>Precondition: Application developed, AppDeveloper authenticated</p> <p>Steps:</p> <p>Actor Actions: AppDeveloper clicks on the publish button</p> <p>System Response: Application is published on the AppStore</p> <p>Alternate paths:</p> <p>Actor Actions: None</p> <p>System Response: None</p> |
| 13 | <p>Use Case: Unpublish Application [unpublishApplication]</p> <p>Description: The process allows the AppDeveloper to unpublish his Application on the AppStore</p> <p>Actor – AppDeveloper</p> <p>Precondition: Application published, AppDeveloper authenticated</p> <p>Steps:</p> <p>Actor Actions: Application is unpublished</p> <p>System Response: The Application is unpublished from the AppStore</p> <p>Alternate paths:</p> <p>Actor Actions: None</p> <p>System Response: None</p> |
| 14 | <p>Use Case: Test Application [testApplication]</p> <p>Description: Developer can view ‘user-view’ for an application created as well as test the application by inputting values in query fields and submitting the query to view the results as expected</p> <p>Actors – AppDeveloper</p> <p>Precondition: Developer must be a logged in, Application should be developed by that developer</p> <p>Steps:</p> <p>Actor Actions: Developer tests application</p> <p>System Responses: User view generated</p> <p>Actor Actions: Developer submits query by inputting query fields</p> <p>System Responses: Results returned as a JSON object</p> <p>Alternate paths:</p> <p>Actor Actions: Developer tests applications containing error</p> <p>System Responses: User view not generated as expected</p> <p>Actor Actions: Developer submits query, but required fields are not filled</p> <p>System Responses: Error message: required fields not filled</p> |

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| 15 | <p>Use Case: Execute Application [executeApplication]</p> <p>Description: AppConsumer wants to execute the application by entering the query parameters.</p> <p>Actors: AppConsumer</p> <p>Precondition: User should be a logged in.</p> <p>Steps:</p> <p>Actor Actions: User submits to execute application</p> <p>System Responses: Results displayed as a JSON object</p> <p>Alternate paths:</p> <p>Actor Actions: User submits to execute application, but required fields are not filled</p> <p>System Responses: Error message: required fields not filled</p> |
| 16 | <p>Use Case: View Result [viewResult]</p> <p>Description: User wants to view results of the query previously submitted</p> <p>Actors: AppConsumer</p> <p>Precondition: User should be logged in, Query submitted is validated</p> <p>Steps:</p> <p>Actor Actions: User executes application to view results</p> <p>System Responses: Results pretty printed by system to be display the JSON object</p> <p>Alternate paths:</p> <p>Actor Actions: User executes application but JSON object is not formed correctly by the system</p> <p>System Responses: Error message: Cannot form JSON object for the returned result</p> |
| 17 | <p>Use Case: View Application [viewApplication]</p> <p>Description: Application Consumer can view all the applications that are downloaded by the Consumer</p> <p>Actors: AppConsumer</p> <p>Precondition: User should be logged in</p> <p>Steps:</p> <p>Actor Actions: User wants to view application</p> <p>System Responses: List of all applications that are downloaded and not deleted by the user till now</p> <p>Alternate paths:</p> <p>Actor Actions: User wants to view application but has not downloaded any applications as yet</p> <p>System Responses: Display: No applications to show</p> <p>Actor Actions: User wants to view application but has deleted all downloaded Applications</p> <p>System Responses: Display: No applications to show</p> |
| 18 | <p>Use Case: Search Application [searchApplication]</p> <p>Description: Application Consumer can search for a desired application</p> <p>Actors: AppConsumer</p> <p>Precondition: User should be logged in</p> <p>Steps:</p> <p>Actor Actions: User searches for application</p> <p>System Responses: All Applications that match the search are returned</p> <p>Alternate paths:</p> <p>Actor Actions: User searches for application</p> <p>System Response: Display: No search results found that does not exist</p> |
| 19 | <p>Use Case: Add Application [addApplication]</p> <p>Description: A consumer can add/ download applications that he wants to use</p> <p>Actors: AppConsumer</p> |

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| | <p>Precondition: User should be logged in</p> <p>Steps:</p> <p>Actor Actions: User adds application that he wishes to use</p> <p>System Responses: Application successfully added</p> <p>Alternate paths:</p> <p>Actor Actions: User adds application</p> <p>System Response: Message: Application is already added that he has already downloaded before</p> |
| 20 | <p>Use Case: Delete Application [deleteApplication]</p> <p>Description: An application consumer can delete applications that he no longer wishes to use</p> <p>Actors: AppConsumer</p> <p>Precondition: User should be logged in</p> <p>Steps:</p> <p>Actor Actions: User deletes application</p> <p>System Responses: Application deleted successfully</p> <p>Alternate paths:</p> <p>Actor Actions: User deletes application that is open</p> <p>System Response: Error Message: Application cannot be deleted as it is open</p> |

Class Diagram:

