**Software Test Plan**

**Statusphere**

**CEN 5016, Spring 2017**

**Version 1.0**

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**Test Plan**

**Overall Objective for Software Test Activity**

* To validate the functionality of Statusphere.

**Description of Test Environment**

The following hardware/software environment setups will be used:

1. Macbook Pro (Retina, 13-inch, early 2015) with MacOS Sierra version 10.12.x; using the following browsers:
   1. Safari version 10.x
   2. Google Chrome version 56+
2. Windows 10 Home (with 64 bit operating system) using the following browsers:
   1. Google Chrome Version 56.0.2924.87 (64-bit)
3. iPhone 7S
4. <Additional Environments TBD>
5. <AWS environment TBD>

Unless noted otherwise, all tests will be carried out, by a developer, in at least one of the above environment setups. All interface tests (excluding mobile interfaces) will be tested at least once in both an environment setup using Google Chrome version 56+ and an environment setup using Safari version 10.x. All mobile interface tests will be tested at least once on an iPhone 7S device.

The above environments are possibly only a subset of the environments on which the software might run; not all possible environment setups that will be used by the system's users can be anticipated, nor tested on.

**Integrity Levels**

This document will specify an *Integrity Level* for all test cases, which specifies the relative importance of the test. The possible values, and their descriptions, are as follows:

1: Not Important; the project can be accepted if any or all of these test cases fail.

2: Moderately Important; the software might be accepted if some of these test cases fail.

3: Extremely Important; the software will likely not be accepted if any of these test cases fail.

4: Catastrophic if failed; the software will be unable to deliver any value if any of these test cases fail; the software will not be acceptable.

**Stopping Criteria**

Testing will stop and the software will be delivered when: all tests with Integrity level 3 or higher have been passed; an *acceptable* number of integrity level 2 tests have been passed; and all other tests have a status of either PASSED or FAILED (as opposed to NOT TESTED). The *acceptable* proportion of tests passed will reduce over time (as the deadline approaches), initially, the software will not be delivered without all integrity level 2+ tests passing. The software will be ***good enough to deliver*** if all Integrity Level 3 and 4 tests are passed.

If errors are found during testing, all tests also scheduled for that sprint (SCRUM; duration varies between 2-5 days) will be executed, (or attempted to be) and their results recorded, before stopping testing and beginning to debug/fix the errors. The status of all tests will be reviewed at the end of each sprint.

If all tests have been passed at least one week before the deadline, additional tests may be added in an effort to detect unfound errors.

**Description of Individual Test Cases**

Describe EACH individual test to be run. For instance, if you plan to run 30 test cases, you would answer the following questions for each of them. A table format or a bulleted format is acceptable.

|  |  |
| --- | --- |
| Test Case Ref. # | TC1-0000 |
| Test Objective | To demonstrate how tests will be formatted. |
| Test Description | Each individual test case will be documented in a table such as this one, with the row labels the same as those in this table. All test cases will have a unique Test Case Ref. # and be in the format: TC<IntegrityLevel>-<YYXX>. Where YY is an integer that indicates the test group (Influencer, Admin, Non-Functional, etc); XX is an integer id, unique to all test cases in group YY; and, IntegrityLevel is an indicator of the importance of the test (see above).  Tests in each group should be ordered from highest- to lowest-priority. |
| Test Conditions | Test will be evaluated in Microsoft Word, running MacOS Sierra Version 10.x.x. |
| Expected Results | A well organized and consistently formatted test plan. |

**1. Interface Tests**

**1.1 Influencer Portal Tests <Leena and Sathya Narayanan>**

|  |  |
| --- | --- |
| Test Case Ref. # | TC4-1101 |
| Test Objective | Test that user (Influencer) is able to login successfully. |
| Test Description | User enters valid username and correct password and clicks on Login button. |
| Test Conditions | See Description of Environment; user must be registered already. |
| Expected Results | User is able to admitted into the system and is able to access the data for that user. |

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| --- | --- |
| Test Case Ref. # | TC2-1102 |
| Test Objective | Test invalid login |
| Test Description | User enters incorrect username and incorrect password and click on login button |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message "Username and Password are incorrect" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1103 |
| Test Objective | Test that empty username/password fails login. |
| Test Description | User enters either empty username or empty password and click on login button |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message "Username or password is required" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1104 |
| Test Objective | Automatic logout of the site when pressing back button |
| Test Description | User logins into the system using valid username and password and press back button. |
| Test Conditions | See Description of Environment; user must be registered already. |
| Expected Results | User will no longer be logged in. |

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| --- | --- |
| Test Case Ref. # | TC3-1105 |
| Test Objective | Test that user is able to apply successfully. |
| Test Description | User enters valid Name/username, Email, Password and click sign up with email button. |
| Test Conditions | See Description of Environment. |
| Expected Results | User is redirected to page indicating that their application has been received; applicant entry is added to database for the user. |

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| --- | --- |
| Test Case Ref. # | TC1-1106 |
| Test Objective | Test unsupplied username during application |
| Test Description | User does not enter Username and click on Apply button |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message showing "Username is required" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1107 |
| Test Objective | Test that applicant is unable to use previously used username. |
| Test Description | User enters username that is already exists in the system. |
| Test Conditions | See Description of Environment; entered username must be already present in the system. |
| Expected Results | Proper error message showing "Username is not available" must be displayed. |

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| --- | --- |
| Test Case Ref. # | TC2-1108 |
| Test Objective | Test if username is valid length |
| Test Description | 1) User enters username with less than 3 characters; 2) user enters username with more than 70 characters. |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message showing "Username is too [short/long]" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1109 |
| Test Objective | Test if Email field is empty during application. |
| Test Description | User does not enter email id. |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message showing "Email is required" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1110 |
| Test Objective | Test if entered Email is valid |
| Test Description | User enters invalid email id(email id without @ ) |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message showing "Enter valid Email" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1111 |
| Test Objective | Test if password field is empty |
| Test Description | User does not enter password |
| Test Conditions | See Description of Environment. |
| Expected Results | Proper error message showing "Password is required" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC1-1112 |
| Test Objective | Test if user is able to signup with Facebook |
| Test Description | Click on the Sign Up button for Facebook |
| Test Conditions | See Description of Environment. |
| Expected Results | User must be get signed up successfully with Facebook |

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| --- | --- |
| Test Case Ref. # | TC1-1113 |
| Test Objective | Test if user is able to signup with Twitter |
| Test Description | User clicks on the Sign Up button for Twitter |
| Test Conditions | See Description of Environment. |
| Expected Results | User must be get signed up successfully with Twitter |

|  |  |
| --- | --- |
| Test Case Ref. # | TC2-1114 |
| Test Objective | Test if user is able to signup with Instagram |
| Test Description | User clicks on the Sign Up button for Instagram |
| Test Conditions | See Description of Environment. |
| Expected Results | User must be get signed up successfully with Instagram |

|  |  |
| --- | --- |
| Test Case Ref. # | TC1-1115 |
| Test Objective | Test if user is able to signup with Google |
| Test Description | User clicks on the Sign Up button for Google |
| Test Conditions |  |
| Expected Results | User must be get signed up successfully with Google. |

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| --- | --- |
| Test Case Ref. # | TC1-1116 |
| Test Objective | Test if user is able to submit the profile details |
| Test Description | User enters the valid details and clicks on submit button. |
| Test Conditions | User must be registered already. |
| Expected Results | User must be able to submit all the profile details successfully |

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| --- | --- |
| Test Case Ref. # | TC1-1117 |
| Test Objective | Test if required fields for profile are empty |
| Test Description | User does not enter first name, last name, Instagram account and address which are required fields. |
| Test Conditions | User must be registered already. |
| Expected Results | Proper error message showing "First name, Last name, Instagram Account, address is required" must be displayed |

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| --- | --- |
| Test Case Ref. # | TC4-1118 |
| Test Objective | Test if the products assigned by admin are displayed to the user in products page |
| Test Description | After accepted by the admin, user is allowed to view the packages that have been assigned to them based on their interest. |
| Test Conditions | User must be accepted by admin. |
| Expected Results | Once accepted the user can move to the products page and the products list should be displayed for the user correctly based on their interest. |

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| --- | --- |
| Test Case Ref. # | TC4-1119 |
| Test Objective | Test if the user is able to view the description of a product when the product is selected. |
| Test Description | When a user clicks on a product in the package list, the description for that product along with the requirements pop up. |
| Test Conditions | User must click on a particular product |
| Expected Results | Pop up appears showing the description of the product along with requirements for that product which the user must satisfy. |

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| --- | --- |
| Test Case Ref. # | TC3-1120 |
| Test Objective | Test if the product is available to the user when clicking on I agree button |
| Test Description | When the user agrees a product, it is added to his to do list |
| Test Conditions | See Environment Description. |
| Expected Results | The product which the user has agreed must be available to him in to do tab in his page. |

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| --- | --- |
| Test Case Ref. # | TC3-1121 |
| Test Objective | Test that product quantity is decremented properly. |
| Test Description | N+1 users attempt to accept a package, of which only N units are available. |
| Test Conditions | See Environment Description. Packages will be selected by the N+1 users within 10 seconds of each other. |
| Expected Results | N users successfully receive the package; it is indicated to 1 user that they did not receive the package, as it is no longer available. |

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| --- | --- |
| Test Case Ref. # | TC2-1122 |
| Test Objective | Test if the user can view his profile in profile tab in his profile |
| Test Description | The user must be able to view his profile information successfully when he navigates to profile tab in his profile. |
| Test Conditions | User must click on the profile tab in his page. |
| Expected Results | All his details which he has entered should be displayed. |

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| Test Case Ref. # | TC2-1123 |
| Test Objective | Test if clicking on edit button allows him to edit his information |
| Test Description | When user clicks on edit button, he should be able to edit his details |
| Test Conditions | User clicks on profile tab and then clicks on edit button |
| Expected Results | User should be able edit his previous information and fill in new information. |

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| --- | --- |
| Test Case Ref. # | TC2-1124 |
| Test Objective | User must be able to edit and update his information in profile tab |
| Test Description | User can update his information if needed by clicking on edit button in the profile tab |
| Test Conditions | User must be navigated to profile tab and must have clicked the edit button |
| Expected Results | User should be able to successfully edit and update his previous details and enter updated details. |

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| --- | --- |
| Test Case Ref. # | TC2-1125 |
| Test Objective | Test if clicking on update button stores the updated information |
| Test Description | When user edits the information and clicks update button, the information should be updated |
| Test Conditions | User clicks on update button after changing his details |
| Expected Results | The profile details of the user should be updated in the database. |

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| --- | --- |
| Test Case Ref. # | TC2-1126 |
| Test Objective | Test if clicking on update button stores the updated information |
| Test Description | When user edits the information and clicks update button, the information should be updated |
| Test Conditions | User clicks on update button after changing his details |
| Expected Results | The profile details of the user should be updated in the database. |

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| --- | --- |
| Test Case Ref. # | TC2-1127 |
| Test Objective | Test if influencer can reset their password |
| Test Description | User clicks "Reset Password" button on login page then enters the email address associated with their account. |
| Test Conditions | See environment details. |
| Expected Results | The user receives an email with a link to a page to reset their password. |

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| --- | --- |
| Test Case Ref. # | TC2-1128 |
| Test Objective | Test user probation |
| Test Description | A user on probation views logs into the system and views Statusbox and Profile pages. |
| Test Conditions | See environment details. |
| Expected Results | It is clearly indicated to the user that they are on probation; the user is unable to view or accept any packages from the Statusbox. |

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| --- | --- |
| Test Case Ref. # | TC4-1129 |
| Test Objective | Test that user is able to view their TODO list. |
| Test Description | A user navigates to the TODO page. |
| Test Conditions | See environment details; several uncompleted packages were added to the database and associated with the user. |
| Expected Results | All uncompleted packages, associated with the user are shown in the TODO list. |

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| --- | --- |
| Test Case Ref. # | TC2-1130 |
| Test Objective | Test 24-hours remaining notification |
| Test Description | A package is associated with a user for a product that only has 24 hours remaining to complete. |
| Test Conditions | See environment details. |
| Expected Results | The user receives an email/notification indicating that they have 24 hours remaining to complete the specified package. |

**1.2. Admin Portal Tests**

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| Test Case Ref. # | TC4-1201 |
| Test Objective | Test if admin is able to login successfully |
| Test Description | Admin enters correct username and password and clicks on the login button. |
| Test Conditions | See Environment Description. |
| Expected Results | Admin should login successfully to the web page. |

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| Test Case Ref. # | TC4-1202 |
| Test Objective | Test if admin is not able to login successfully. |
| Test Description | If Admin enters wrong username or wrong password. |
| Test Conditions | See Environment Description. |
| Expected Results | Proper error message "username and/or password are incorrect" must be displayed. |

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| --- | --- |
| Test Case Ref . # | TC4-1203 |
| Test Objective | Test if admin is directed to list of packages page once the package tab is selected. |
| Test Description | When the admin clicks on the package option, the complete list of packages available should be displayed. |
| Test Conditions | See Environment Description. |
| Expected results | It should lead the admin to the package page. |

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| Test Case Ref . # | TC4-1204 |
| Test Objective | Test whether admin is provided with the complete information of particular package selected. |
| Test Description | Once the admin selects a particular package to view, the page should have all the necessary details related to the package. |
| Test Conditions | See Environment Description. |
| Expected results | Admin must be able to get complete information of the package. |

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| --- | --- |
| Test Case Ref . # | TC3-1205 |
| Test Objective | Test whether the admin can change the availability of the particular package. |
| Test Description | According to the details of the package, the admin can select the required availability for the package. |
| Test Conditions | See Environment Description. |
| Expected results | Admin can change availability of the package. |

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| --- | --- |
| Test Case Ref . # | TC4-1206 |
| Test Objective | Test whether admin is able to assign the package to that particular influencer. |
| Test Description | Once the select influencer tab is selected, the admin must be able to see the list of influencer in order to assign the particular package to the corresponding influencer. |
| Test Conditions | See Environment Description. |
| Expected results | The admin is able to assign the package to the influencer. |

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| --- | --- |
| Test Case Ref . # | TC3-1207 |
| Test Objective | Test if the admin is directed to the influencers page once the influencer tab is selected. |
| Test Description | When the admin clicks on the influencer option, the complete list of influencers available should be displayed. |
| Test Conditions | See Environment Description. |
| Expected results | It should lead the admin to the Influencer page. |

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| --- | --- |
| Test Case Ref . # | TC2-1208 |
| Test Objective | Test whether the admin is provided with the complete information of the particular influencer and the status of the package they have selected. |
| Test Description | Once the admin selects a particular influencer to view, the page should have all the necessary details related to that influencer. |
| Test Conditions | See Environment Description. |
| Expected results | Admin must be able to get complete information of the influencer. |

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| --- | --- |
| Test Case Ref . # | TC2-1209 |
| Test Objective | Test whether the admin is able to access the TO-DOs page of the influencer. |
| Test Description | Once the admin clicks on To-DOs option, she should get the list of uncompleted packages of that influencer. |
| Test Conditions | See Environment Description. |
| Expected results | Admin must be able to view the TO-DOs page. |

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| --- | --- |
| Test Case Ref . # | TC3-1210 |
| Test Objective | The package should be automatically assigned to the particular influencer. |
| Test Description | Once the admin clicks on the Assign option in the influencer page, the package should be viewable by the selected influencer. |
| Test Conditions | See Environment Description. |
| Expected results | The package requested by the influencer should be assigned to them. |

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| --- | --- |
| Test Case Ref . # | TC3-1211 |
| Test Objective | Test if the admin is directed to the list of applicants page once the applicant tab is selected. |
| Test Description | When the admin clicks on the applicants option, the complete list of the applicants should be displayed. |
| Test Conditions | See Environment Description. |
| Expected results | It should lead the admin to the Applicants page. |

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| --- | --- |
| Test Case Ref . # | TC3-1212 |
| Test Objective | Test whether the admin is provided with the complete information of the particular applicant. |
| Test Description | Once the admin selects a particular applicant to view, the corresponding page should have all the details of the applicant. |
| Test Conditions | See Environment Description. |
| Expected results | Admin must be able to get the complete information of the applicant. |

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| --- | --- |
| Test Case Ref . # | TC2-1213 |
| Test Objective | Test if the admin is directed to the notifications page once the notifications tab is selected. |
| Test Description | When the admin clicks on the notifications option, the complete details of the sent mail, saved drafts should appear. |
| Test Conditions | See Environment Description. |
| Expected results | It should lead the admin to the notifications page. |

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| --- | --- |
| Test Case Ref . # | TC1-1214 |
| Test Objective | Test whether the admin is able to compose a new mail, or check her inbox or check the drafts ands sent mails. |
| Test Description | When the admin clicks on compose mail, a pop up box should appear where she can compose a mail and send. When she clicks on inbox, she must be able to view all the mails received. Also she should be able to see the draft mails. |
| Test Conditions | See Environment Description. |
| Expected results | Admin must be able to perform all the functions in the notifications page. |

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| Test Case Ref . # | TC1-1215 |
| Test Objective | Test whether the admin is directed to her profile page when she clicks the myprofile tab. |
| Test Description | When the admin clicks the my profile button, she is able to see her profile. |
| Test Conditions | See Environment Description. |
| Expected results | On clicking the myprofile button, the admin's profile is popped up and the admin should be able to edit the information. |

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| Test Case Ref . # | TC3-1216 |
| Test Objective | Test if clicking on edit button allows the admin to edit the package. |
| Test Description | When admin clicks on edit button, they should be able to edit the details of the package and save it and upload to the influencer. |
| Test Conditions | See Environment Description. |
| Expected results | Admin should be able edit the previous information and fill in new information and update to the influencer |

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| --- | --- |
| Test Case Ref . # | TC4-1217 |
| Test Objective | Test if admin is able to create a new package on clicking draft package button. |
| Test Description | When admin clicks on create package, a page will appear where it contains all necessary fields required to create a package. |
| Test Conditions | See Environment Description. |
| Expected results | Admin should be able to create a new package by filling all the necessary fields in that page. |

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| Test Case Ref . # | TC4-1218 |
| Test Objective | Test if admin can upload the newly created package to influencer or to save and edit the package later. |
| Test Description | Once the admin has created the package, he/her can upload to the influencer by clicking on "upload to influencer" or he/her can save the fields currently filled and can make any changes later by clicking "save and edit later" |
| Test Conditions | See Environment Description. |
| Expected results | Admin should be able to upload the new package to the influencer. |

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| --- | --- |
| Test Case Ref . # | TC4-1219 |
| Test Objective | Test if the admin is able to accept an applicant. |
| Test Description |  |
| Test Conditions | See Environment Description. |
| Expected results | Pop-up confirms acceptance of the applicant, the admin is redirected to the previous page (view applicants), the applicant now has a corresponding influencer entry viewable on the influencers page. The applicant's entry no longer appears on the view applicants page. |

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| Test Case Ref . # | TC2-1220 |
| Test Objective | Test if the admin is able to reject an applicant. |
| Test Description | While admin is viewing an applicant, they click "Reject". |
| Test Conditions | See Environment Description. |
| Expected results | Pop-up confirms rejectance of the applicant, the admin is redirected to the previous page (view applicants); the applicant's entry no longer appears on the view applicants page (with default settings). |

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| Test Case Ref . # | TC2-1221 |
| Test Objective | Test if the admin is able to place user on probation |
| Test Description | While admin is viewing an influencer's profile, they click place on probation. |
| Test Conditions | See Environment Description. |
| Expected results | Pop-up confirms the placement on probation; when confirmed, the user's status now indicates that they are on probation. |

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| Test Case Ref. # | TC2-1222 |
| Test Objective | Test remove user |
| Test Description | The admin is viewing an influencer's profile and select's "Remove User". |
| Test Conditions | See environment details. |
| Expected Results | Pop-up confirms the removal; when confirmed, the admin is redirected to the Influencers page and the removed user is no longer listed. |

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| Test Case Ref. # | TC3-1223 |
| Test Objective | Test complete package. |
| Test Description | The admin is viewing the TODO list of an Influencer and marks a package as completed. |
| Test Conditions | See environment details. |
| Expected Results | The package no longer appears on the user's TODO list; the user's score is incremented by 1. |

**1.3 Mobile Tests**

Test cases TC3-1301 – TC2-1326

All test cases in Individual Test Cases section 1.1 Influencer Tests, should also be completed on the mobile app; some aspects of the test descriptions might be slightly different (i.e.: "touch" should replace "click"); additionally, all test cases in this section will have an Integrity Level 1 Level below the corresponding test in section 1.1 (if still above Integrity Level 1). For the sake of brevity, the tests will not be re-described here.

**1.4. Miscellaneous Tests**

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| Test Case Ref. # | TC1-1401 |
| Test Objective | Check if window is re-sized when browser size is changed |
| Test Description | Web application is loaded into the browser and changed the browser size. |
| Test Conditions |  |
| Expected Results | Window must be get resized when user change the browser size |

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| Test Case Ref. # | TC2-1402 |
| Test Objective | Sign-on to the application with multiple user accounts at the same time and capture latency of authentication |
| Test Description | Multiple users (2, 4, 8) sign up into system at the same time. |
| Test Conditions | Multiple users must be registered users already |
| Test Case Ref. # | TC1-1403 |
| Test Objective | Check if the web application works on different browsers |
| Test Description | Load the application on different browsers Firefox, Google chrome, Microsoft Edge, Safari |
| Test Conditions | See Environment Description. |
| Expected Results | Web application must works on all the browsers |

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| Test Case Ref. # | TC2-1404 |
| Test Objective | When remember me is unchecked while login then username and password should not be get saved in browser cookies. |
| Test Description | User enters username and password and does not check remember me checkbox and click on Login button |
| Test Conditions | See Environment Description; user must be registered already |
| Expected Results | User's username and password should not be get saved in the browser cookies |

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| --- | --- |
| Test Case Ref. # | TC2-1405 |
| Test Objective | When remember me is checked while login then username and password should get saved in browser cookies. |
| Test Description | User enters username and password and checks remember me checkbox and click on Login button |
| Test Conditions | User must be registered already |
| Expected Results | User's username and password should be get saved in the browser cookies so next time when user logins no need to enter username and password |

**2. Back-End Functionality and Data Tests**

**2.1 Influencer Tests**

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| Test Case Ref. # | TC3-2101 |
| Test Objective | To test the ability for the Influencer to login to the admin portal using a valid username and a valid password. |
| Test Description | Test with all possible valid entries. Check if the system is able to cover all the scenario and allow to move to the Influencer web page. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencer will be able to login successfully |

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| Test Case Ref. # | TC3-2102 |
| Test Objective | To test whether influencer will be able to view package in their area. |
| Test Description | Test with different influencer profiles. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencer will be able to view all packages that have been assigned to the user. |

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| --- | --- |
| Test Case Ref. # | TC3-2103 |
| Test Objective | Influencer will be able to select package to add to their to-do list. |
| Test Description | Test with various influencers selecting different packages in their areas. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencer will be able to select the package without any errors; package entry is added to database for the user. |

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| Test Case Ref. # | TC1-2104 |
| Test Objective | Influencer will be able to agree to complete the requirements appropriately of the package they have selected. |
| Test Description | Test with a number of influencers to agree to complete requirements for their package. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencer will be able to agree to complete the requirements properly. |

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| Test Case Ref. # | TC3-2105 |
| Test Objective | Influencers will be able to indicate that they have completed all the requirements on their to-do list. |
| Test Description | Test with many influencers who have completed their requirements by putting in the to-do list. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencers will be able to indicate that they have completed all the requirements by putting in their to-do list; the status of the corresponding requirements will be changed in the Database. |

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| Test Case Ref. # | TC2-2106 |
| Test Objective | Influencers will be able to share the link of their to-do list after completion of the requirements. |
| Test Description | Test with various influencers sharing their links of their to-do lists. |
| Test Conditions | See Environment Description. |
| Expected Results | Influencers will successfully be able to share the links of their to-do lists. |

**2.2 Admin Tests**

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| Test Case Ref. # | TC4-2201 |
| Test Objective | To test the ability for the Admin to login to the admin portal using a valid user-ID and a valid password. |
| Test Description | Test with all possible valid entries. Check if the system is able to cover all the scenario and allow to move to the admin portal. |
| Test Conditions | See Environment Description. |
| Expected Results | With valid login information, the Admin will be directed to the full admin portal. |

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| Test Case Ref. # | TC4-2202 |
| Test Objective | To test that invalid admin credentials will not allow access to the admin portal |
| Test Description | Test with wrong credentials. Check if the system is able to recognize wrong credentials and pass the message to login page. |
| Test Conditions | See Environment Description. |
| Expected Results | With invalid login information, the user will remain at the login page and be alerted that an invalid username and/or password was provided. |

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| Test Case Ref. # | TC4-2203 |
| Test Objective | To test backend system is able to retrieve package list from database on selection of packages on admin page. |
| Test Description | Check the package request from admin portal able to retrieve data from Database. The response from backend should be in a JSON format. Required to cross check the JSON entries with the corresponding database entries. |
| Test Conditions | See Environment Description. |
| Expected Results | Data to be retrieved in JSON format and should be matched with Database entries. |

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| Test Case Ref. # | TC4-2204 |
| Test Objective | To test backend system is able to retrieve influencer details correctly from database on selection of influencer on admin page. |
| Test Description | The backend system send the response to the client in a JSON format. The JOSN entries are to be cross checked with corresponding database entries.. |
| Test Conditions | See Environment Description. |
| Expected Results | Data to be retrieved in JSON format and should be matched with Database entries. |

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| Test Case Ref. # | TC4-2205 |
| Test Objective | To test backend system is able to retrieve applicant details correctly from database on selection of applicant on admin page. |
| Test Description | The backend system send the response to the client in a JSON format. The JOSN entries are to be cross checked with corresponding database entries. |
| Test Conditions | See Environment Description. |
| Expected Results | Data to be retrieved in JSON format and should be matched with Database entries |

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| Test Case Ref. # | TC2-2206 |
| Test Objective | To test backend notification functionality from admin page. |
| Test Description | Backend system able to send the e-mail notification to influencers. |
| Test Conditions | See Environment Description. |
| Expected Results | The system should be able to send e-mail notification to the specified influencer. |

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| Test Case Ref. # | TC1-2207 |
| Test Objective | To test backend system is able to retrieve admins details correctly from database on selection of MyProfile on admin page.. |
| Test Description | The backend system should be able to retrieve all the information for admins. It sends the response to the client in a JSON format. The JOSN entries are to be cross checked with corresponding database entries. |
| Test Conditions | See Environment Description. |
| Expected Results | Data to be retrieved in JSON format and should be matched with Database entries |

**2.3. Utility Tools Tests**

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| Test Case Ref. # | TC2-2301 |
| Test Objective | To test follower count look-up tools. |
| Test Description | The reporting tools will look up the number of followers for a given username on a given Social Media Platform. |
| Test Conditions | See Environment Description; several usernames will be selected from Instagram. |
| Expected Results | Returned results will match actual follower counts. |

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| Test Case Ref. # | TC2-2302 |
| Test Objective | To test likes-per-post look-up tools |
| Test Description | The reporting tools will look up all posts by a given username on a given Social Media Platform and return the total number of likes for each post. |
| Test Conditions | See Environment Description; several usernames will be selected from Instagram |
| Expected Results | Returned results will match actual likes-per-post number. |

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| Test Case Ref. # | TC2-2303 |
| Test Objective | Calculate trimmed-average number of likes-per-post for user. |
| Test Description | The reporting tools will look up all posts by a given username on a given Social Media Platform and return the trimmed average number of likes per post for that user; trim =[0, .1, .25, .49, .5, .51]. |
| Test Conditions | See Environment Description; several usernames will be selected from Instagram |
| Expected Results | The correct trimmed average will be returned for each user for each trim; note that a trim >= .5 will result in all posts being trimmed and an average 0, this should be indicated in interface. |

**3. Tests for Non-Functional Requirements**

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| Test Case Ref. # | TC4-3001 |
| Test Objective | To test the visual quality of the Influencer portal on a desktop/laptop using Google Chrome browser. |
| Test Description | All pages will be viewed from Google Chrome browser. |
| Test Conditions | Google Chrome version 56.x; see environment details. |
| Expected Results | All pages are visually satisfactory to the client. |

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| Test Case Ref. # | TC4-3002 |
| Test Objective | To test the visual quality of the Influencer portal on a desktop/laptop using Safari browser. |
| Test Description | All pages will be viewed from Safari browser. |
| Test Conditions | Safari version 10.x; see environment details. |
| Expected Results | All pages are visually satisfactory to the client. |

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| Test Case Ref. # | TC3-3003 |
| Test Objective | To test the user experience of an Influencer. |
| Test Description | A developer and a non-developer will each be asked to complete several tasks in the Influencer portal and their completion times will be recorded; the non-developer will asked to provide feedback on their experience. |
| Test Conditions | See environment details; the non-developer will use an environment of their choice. |
| Expected Results | The non-developer will have a total task completion time within 15% of the developer; the non-developer will have no major complaints about the interface. |

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| Test Case Ref. # | TC3-3004 |
| Test Objective | Test if fields are properly escaped |
| Test Description | A SQL injection is attempted for name, email, password, etc. |
| Test Conditions | See Description of Environment. |
| Expected Results | Error messages are displayed for fields that do not allow special characters; special characters (such as quotation marks) are properly escaped and SQL injection fails. |

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| Test Case Ref. # | TC2-3005 |
| Test Objective | Test to check delay while reading from database |
| Test Description | The test should check for any delay while accessing data from the database. |
| Test Conditions | See Environment Description; the user should have a sufficiently fast internet connection. |
| Expected Results | User should not experience noticeable lag (relative to the speed of the user's internet). |

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| Test Case Ref. # | TC3-3006 |
| Test Objective | To test the user experience of an Admin. |
| Test Description | A developer and a non-developer will each be asked to complete several tasks in the Admin portal and their completion times will be recorded; the non-developer will asked to provide feedback on their experience. |
| Test Conditions | See environment details; the non-developer will use an environment of their choice. |
| Expected Results | The non-developer will have a total task completion time within 15% of the developer; the non-developer will have no major complaints about the interface. |

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| Test Case Ref. # | TC2-3007 |
| Test Objective | To test that all stored passwords are in a hashed format in the database. |
| Test Description | An applicant will supply a password: "1234-paSSW". The applicant will log in with the given password. |
| Test Conditions | See Environment Description. |
| Expected Results | The hash-value of "1234-paSSW" will be stored as the password for the applicant, the applicant will successfully login with their password. |

**4. Acceptance Tests**

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| Test Case Ref. # | TC4-4001 |
| Test Objective | Test user application. |
| Test Description | Several developers, and possibly the Client, will create a total of 10 applicant profiles, with varying demographic information and areas of interest. |
| Test Conditions | See Environment Description; database will be empty prior to test. |
| Expected Results | 10 applications will be added to the database. |

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| Test Case Ref. # | TC4-4002 |
| Test Objective | Test applicant acceptance. |
| Test Description | Client will log into admin portal and accept several applicants, with varying areas of interest and demographics. |
| Test Conditions | See Environment Description; see previous acceptance tests. |
| Expected Results | Several applicants will be added to the system as influencers. |

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| Test Case Ref. # | TC4-4003 |
| Test Objective | Test influencer's first login. |
| Test Description | A previously accepted applicant will login. |
| Test Conditions | See Environment Description; see previous acceptance tests. |
| Expected Results | The user will be prompted to complete their profile details. |

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| Test Case Ref. # | TC4-4004 |
| Test Objective | Test package drafting |
| Test Description | Client will log into admin portal and draft several packages, targeting various areas of interest and/or demographics; an influencer (whose demographics and areas of interest match with at least one of the packages) will view their available packages. |
| Test Conditions | See Environment Description; see previous acceptance tests. |
| Expected Results | Several packages will have been added to the database, as drafts, but the influencer will not be able to see any of the packages, as they have not yet been made available. |

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| Test Case Ref. # | TC4-4005 |
| Test Objective | Test package release |
| Test Description | Admin will select a drafted package and push it to all influencers with matching areas of interest and demographics; an influencer (whom meets the criteria to view the package) will view their available packages; an influencer (whom does NOT meet the criteria to view the package) will view their available packages. |
| Test Conditions | See Environment Description; see previous acceptance tests. |
| Expected Results | The package will have its status changed in the database to available; the first influencer will receive an email indicating that new packages are available and will be able to view and select the package in their statusbox; the second influencer will not receive an email, nor will they see any packages in their statusbox. |

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| Test Case Ref. # | TC4-4006 |
| Test Objective | Test Influencer TODOs and Status |
| Test Description | Several users (but not all accepted users) login and select several available packages each ; N+1 users attempt to select a package with an available quantity of N; the users navigate to the TODO page. The admin views the influencer's statuses. |
| Test Conditions | See Environment Description; see previous acceptance tests; admin has drafted additional packages. |
| Expected Results | Users will have all packages that they successfully accepted on their TODO list; 1 user will have failed to select a package because the quantity was exceeded. The admin will see that each user that accepted at least one package will have their status set to "UNCOMPLETED PACKAGES"; the other users (that did not accept a package) will have their status as "NO SELECTED PACKAGES". |

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| Test Case Ref. # | TC2-4007 |
| Test Objective | Test to check User Login with Instagram |
| Test Description | The test should check if user is able to login using Instagram |
| Test Conditions | See Environment Description. |
| Expected Results | User should successfully login |

**Trace of Individual Test Cases to the Requirements Traceability Matrix**

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| --- | --- | --- | --- | --- | --- |
| Req ID | Requirement Description | Architecture Reference | Design Reference (component / module) | Test Case Ref. | Status |
| FR001 | Influencer application | 3.1.Applicant | 4.4.1.b | TC3-1105,  TC4-4001 |  |
| FR002 | Applicant Acceptance | 3.1.Admin | 4.4.10.b | TC4-1219,  TC4-4002 |  |
| FR003 | Applicant Rejection | 3.1.Admin | 4.4.10.b | TC2-1220,  TC4-4002 |  |
| FR004 | Profile Completion | 3.1.Influencer | 4.4.2.a | TC1-116,  TC1-1117, TC4-4003 |  |
| FR005 | Basic Influencer Login | 3.1.Influencer | 4.4.1.a | TC4-1101 |  |
| FR006 | Login with SMP | 3.1.Influencer, 3.1.OAuth | 4.4.1.[a,c] | TCX-1112 – TCX-1115,  TC2-4007 |  |
| FR007 | Influencer Password Reset | 3.1.Influencer | TBD | TC2-1127 |  |
| FR008 | View Packages | 3.1.Influencer, 3.1.ContentServer | 4.4.3.[a,b] | TC4-1118, TC4-1119,  TC4-4005 |  |
| FR009 | Place User on Probation | 3.1.Admin | TBD | TC2-1128, TC2-1222 |  |
| FR010 | Accept Package | 3.1.Influencer | 4.4.4.[a,b] | TC3-1120,  TC4-4006 |  |
| FR011 | Add Package to TODOs | 3.1.ContentServer, 3.1.DB | 2.3.1.Package | TC3-2103,  TC4-4006 |  |
| FR012 | View TODOs (Influencer) | 3.1.Influencer | 4.4.5.[a,b,c] | TC4-1129,  TC4-4006 |  |
| FR013 | Prove Package Completion | 3.1.Influencer | 4.4.5.[a,c] | TC2-2105, TC2-2106 |  |
| FR014 | Push Notifications | 3.1.Admin, 3.1.UtilityTools | 4.4.7 | TC2-1213, TC1-1214 |  |
| FR017 | 24 Hours Remaining Notification | 3.1.UtilityTools | TBD | TC2-1130 |  |
| FR018 | Admin Login | 3.1.Admin | 4.4.6 | TC4-1201 |  |
| FR019 | View Influencers Data | 3.1.Admin, 3.1.ContentServer | 4.4.7 | TC3-1207,  TC4-2204,  TC4-4006 |  |
| FR020 | View Packages Data | 3.1.Admin, 3.1.ContentServer | 4.4.7, 4.4.8.a | TC4-1203,  TC4-2203 |  |
| FR021 | View Influencer-Package Data | 3.1.Admin, 3.1.ContentServer | 4.4.7\*, 4.4.8.a\* | TBD | OUTDATED\* |
| FR022 | Filter Data Tables | 3.1.Admin, 3.1.ContentServer | TBD | TBD | OUTDATED\* |
| FR023 | Remove User | 3.1.Admin, 3.1.Database | TBD | TC2-1222 |  |
| FR024 | View Influencer's TODOs (as Admin) | 3.1.Admin | 4.4.9.[a,b,c] | TC2-1209,  TC4-4006 |  |
| FR025 | Mark Package as Completed | 3.1.Admin | 4.4.9.[b,c] | TC2-1223 |  |
| FR026 | Remove Completed Package from TODOs | 3.1.UtilityTools, 3.1.DB | 2.3.1.Package | TC2-1223 |  |
| FR027 | Draft New Package | 3.1.Admin, 3.1.DB | 4.4.8.b | TC3-1216, TC4-1217,  TC4-4004 |  |
| FR028 | Push Drafted Packages | 3.1.Admin, 3.1.DB | 4.4.8.b\*\* | TC4-1218,  TC4-4005 |  |
| FR029 | Look-up No. of Followers | 3.1.Admin, 3.1.UtilityTools | TBD | TC2-2301 |  |
| FR030 | Look-up No. of Likes | 3.1.Admin, 3.1.UtilityTools | TBD | TC2-2302 |  |
| FR031 | Calculate Trimmed Avg. Likes per Post | 3.1.Admin, 3.1.UtilityTools | TBD | TC2-2303 |  |
|  |  |  |  |  |  |
| IR004 | Validation of user's login credentials | 3.1 OAuth |  | TC4-2202, TC3-3004 |  |
| IR005 | Selection of packages based on User's interests | 3.1 Influencer | Figure: 4.4.3.a | TC4-1118, TC4-1119,  TC4-4005 |  |
| IR009 | Assignment of a new package by admin based on user's previous performance | 3.1 Admin  3.1 Database |  | TC3-1207,  TC4-4006 |  |
| PR001 | Browser Support | N/A | N/A | TC4-3001, TC4-3002 |  |
| UHF001 | Ease of Use (Influencers) | N/A | N/A | TC3-3003 |  |
| UHF002 | Ease of Use (Admin) | N/A | N/A | TC3-3006 |  |
| S001 | Secure Password Storage | N/A | N/A | TC2-1404,  TC2-1405,  TC3-3004,  TC2-3007 |  |
| S002 | Personal Information Security | N/A | N/A | TC2-1404,  TC2-1405,  TC3-3004 |  |
| U001 | Native Look and Feel | N/A | N/A | TC4-3001,  TC4-3002,  All TCX-13XX |  |
| U003 | IOS App | N/A | N/A | All TCX-13XX |  |
| P001 | Multiple Concurrent Users | N/A | N/A | TC3-1121,  TC4-4001 |  |
| P002 | Acceptable Latency | N/A | N/A | TC2-3005 |  |

\* Requirements with an "OUTDATED" status correspond to requirements / design aspects that are not currently a part of the design; they will be removed when their alternatives have been accepted.