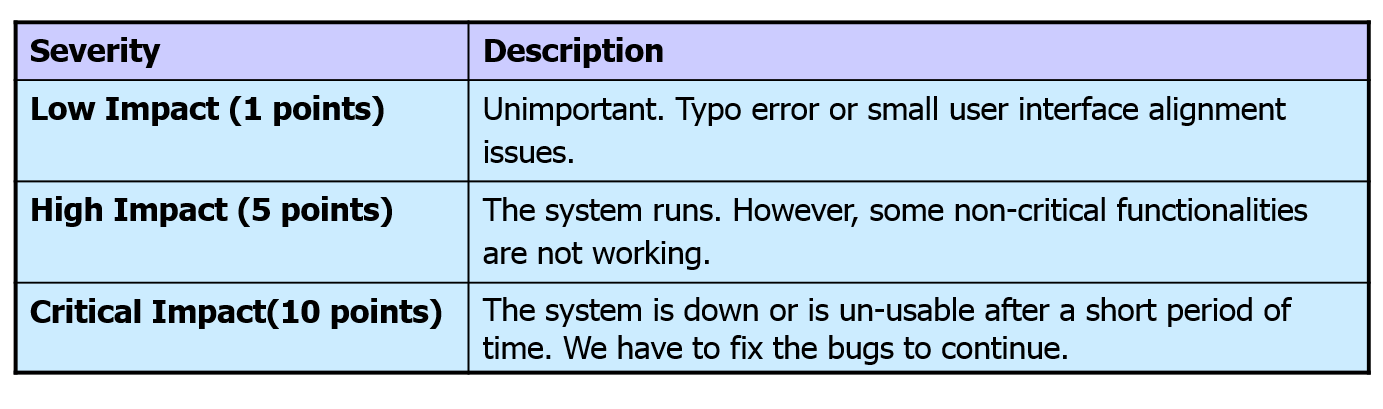
**Test Plan**

1. This test plan document serves as a reference document for every PM which should be read and update at the beginning of iteration to prepare for testing after programming tasks.
2. PM is responsible to prepare test cases
3. Each member has to have a general understanding of the test procedures

**IMPORTANT (PLEASE READ BEFORE PROCEEDING WITH TESTING):**

1. Each testing process is done after the completion of all coding tasks in the iteration.
2. The test must refer to **Bug metrics template Reference sheet (table is shown below)** to determine the severity of the bugs found in the testing process.



**Before you begin testing:**

**Step 1:** Review Test Cases

**Step 2:** Update the testing session in the table below

**Step 3:** Update the test results on test case for the function

**Step 4:** Log all bugs in the bm.xlsx file located under metric folder

**Step 5**: Commit the following files to GIT (bm.xlsx, test cases with result and test plan) and the app folder

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TESTING SESSION | | | | | | |
| Function | Tester / Debugger | Test Time | Setup | Bug Found | Severity | Debug time |
| e.g. Login | ABC  DEF | 1200 - 1500 | ABC’s Laptop | <Please describe, leave blank if there is no bug> | 1  (leave blank if no bug) | 1600-1700  (leave blank if no bug) |
| Login / Logout | Ming Kwang Eugene Tan | 1930 - 2100 | Eugene’s laptop | Enter admin into username input field and password input field. Click Submit. Unable to redirect to adminHomepage | 5 | 1935-1938 |
| View All Course | Cristabel Lau  Quek Yew Kit | 14:13 – 14:30 | Yew Kit’s Laptop | List of courses displayed is not sorted by courseCode, courseName | 1 | 14:35 – 14:45 |
| Search for a course | Cristabel Lau  Quek Yew Kit | 14:55 – 15:15 | Yew Kit’s Laptop | Could not retrieve course with courseCode. E.g. IS101 | 5 | 15:15 to 15:50 |
| Search for a course | Cristabel Lau  Quek Yew Kit | 14:55 – 15:15 | Yew Kit’s Laptop | Could not retrieve course with courseName. E.g. Calculus | 5 | 15:15 to 15:50 |
| Bootstrap - Unzip and extract function | Cristabel Lau  Wilson He | 9:45 – 10:45 | Cristabel’s Laptop | Upload .zip files and the csv files are extracted successfully with  errors (No folder contained in the zip file) | 5 | 10:45 to 11:45 |
| Bootstrap - Unzip and extract function | Cristabel Lau  Wilson He | 9:45 – 10:45 | Cristabel’s Laptop | System did not delete the .zip file (with no folder) in the uploads folder  Failed to display error message when user uploaded files which does not end with .zip | 1  1 | 11:50 to 12:20 |
| Bidding Cart Function | Eugene Tan  Jett Quek | 16:15 –17:15 | Eugene’s laptop | Student allowed to checkout of cart when exam timetable clashes with cart/bid items | 5 | 17:15 – 18:26 |
| Bidding Cart Function | Eugene Tan  Jett Quek | 16:15 – 17:15 | Eugene’s laptop | Student allowed to checkout of cart when timetable clashes with cart/bid items | 5 | 18:26 – 19:45 |
| Bidding Cart Function | Eugene Tan  Jett Quek | 16:15 – 17:15 | Eugene’s laptop | No error displayed when blank input is entered and checkout is refused | 1 | 19:45 – 20:11 |
| Bootstrap – Student Validation | Wilson He  Ming Kwang | 16:40 – 17:40 | Wilson’s laptop | No bugs found during testing | N/A | 17:49 – 17:54 |
| Bootstrap – Course Validation | Ming Kwang  Cristabel Lau | 17:45 – 18:25 | Cristabel’s laptop | No bugs found during testing | N/A | 18:25 – 18:45 |
| Bootstrap – Section Validation | Cristabel Lau  Wilson He | 12:00 – 13:00 | Wilson’s Laptop | No bugs found during testing | N/A | 14:45 – 14:55 |
| Bootstrap – Prerequisite Validation | Ming Kwang  Cristabel Lau | 15:30 – 16:30 | Cristabel’s Laptop | No bugs found during testing | N/A | 17:13 – 17:14 |
| Regression Testing (All functionalities to date) | Eugene Tan  Wilson He | 15:02 to 16:30 | Wilson’s Laptop | Unable to upload zip files to Amazon AWS | 5 | 16:30 to 18:50 |
| Bootstrap – Course completed validation | Cristabel Lau  Wilson He | 12:00 – 13:00 | Wilson’s Laptop | No bugs found during testing. | N/A | 18:00 to 19:30 |
| Bootstrap – Bid validation | Cristabel Lau Wilson He | 19:33 – 20:00 | Wilson’s Laptop | No bugs found during testing. | N/A | 20:01- 20:02 |
| Start/End Round Function | Ming Kwang  Cristabel | 10:00-11:00 | Cristabel’s Laptop | Logic to generate successful bids for round 1 did not adhere to the requirements. It allowed multiple bids at the clearing price to be accepted. | 5 | 20:05-22:18 |
| Debugging of Error Log Function | Wilson He  Cristabel Lau | 12:30-13:00 | Cristabel’s Laptop | No bugs found during testing. | N/A | 13:07-13:55 |
| Debugging of Insert Function | Wilson He  Cristabel Lau | 12:00-12:30 | Cristabel’s Laptop | No bugs found during testing. | N/A | 14:00-14:21 |
| Debug View Student's Enrolled Course Details function | Wilson He  Cristabel Lau | 15:52-16:04 | Eugene’s Laptop | No bugs found during testing. | N/A | 16:04-16:204 |
| Debugging of Drop a section function | Eugene Tan, Jett Quek | 16:05-16:20 | Eugene’s Laptop | No bugs found during testing. | N/A | 16:20 – 16:20 |
| Debug View Bidding Results Function | Wilson He, Cristabel Lau | 13:00-13:30 | Cristabel’s Laptop | No bugs found during testing. | N/A | 16:40-17:25 |
| Testing and debugging JSON authenticate web service | Cristabel Lau, Ming Kwang | 15:33 – 16:00 | Ming Kwang’s Laptop | No bugs found during testing. | N/A | 15:45 – 15:45 |
| Debugging student time table | Jett Quek Yew Kit  Wilson He | 18:15 – 18:35 | Yew Kit’s Laptop | Unable to read all the csv files after unzipping the zip file at Amazon AWS (OS dependencies, Linux)  Unable to read timetable JSON file on Amazon AWS | 5  5 | 18:35 – 19:45 |
| Testing and debugging of JSON delete bid | Yew Kit  Wilson He | 19:17 – 20:17 | Yew Kit’s Laptop | Unable to drop student bid  Incorrect error message for invalid token | 5  1 | 20:17-22:12 |
| Testing and debugging of JSON drop section | Ming Kwang, Cristabel Lau | 13:37-14:04 | Cristabel’s Laptop | 2 formatting issues. | 1  1 | 13:37-14:04 |
| Testing and debugging of JSON bootstrap | Ming Kwang, Cristabel Lau | 14:12-14:20 | Cristabel’s Laptop | No bugs found during testing. | N/A | 14:12-14:20 |
| Testing and debugging of JSON dump User | Yew Kit  Wilson He | 14:33-15:33 | Yew Kit’s Laptop | Wrong error message:  Missing parameters on Url   * Missing r, missing token | 1 | 15:33-16:22 |
| Testing and debugging of JSON dump bid | Yew Kit  Wilson He | 16:26-17:26 | Yew Kit’s Laptop | Wrong error message for  Invalid course  Declare both arraylist successfulBids and unsuccessful in the wrong method in BidDAO | 1  5 | 17:26 – 18:39 |
| Testing and debugging of JSON dump table | Eugene Tan  Tan Ming Kwang | 12:00-15:00 | Eugene’s Laptop | Error message will not be displayed if exception is caught | 1 | 13:48 – 16:48 |
| Testing and debugging of JSON dump Section | Yew Kit  Wilson He | 15:15-16:15 | Yew Kit’s Laptop | Wrong error message:  -Could not find any students enrolled in the section | 1 | 16:15- 17:38 |
| Testing and debugging of JSON updateBid | Yew Kit  Wilson He | 22:01 – 23:01 | Yew Kit’s Laptop | Wrong error messages  - Admin tries bidding with amt lesser than minimum bid in round 2  - Admin tries bidding when exam timetable timeslot for the section clashes with that of a previously bidded section for the student  - Admin tries updating a bid when student has 5 sections bidded | 5 | 23:01-23:35 |
| Testing and debugging Search for a course function, view all courses and Login | Ming Kwang  Wilson He | 12:59 – 14:50 | Wilson’s laptop | No bugs found during testing. |  | 12:59 – 14:50 |
| Testing and debugging for JSON Update Bid | Ming Kwang  Wilson He | 15:06 – 17:00 | Wilson’s laptop | Incorrect error message shown when user is eligible to bid for the course in round 2 but it shows bid too low | 5 | 15:06 – 17:00 |
| Testing and debugging Bootstrap Function (Prereq / Course Completed / Bid / Insert Data) | Ming Kwang  Wilson He | 09:02 – 10:51 | Ming Kwang’s laptop | No bugs found during testing. |  | 09:02 – 10:51 |
| Testing and debugging Bootstrap Function (Prereq / Course Completed / Bid / Insert Data) | Eugene, Cristabel | 13:45 – 16:00 | Eugene’s laptop | No bugs found during testing. |  | 13:45 – 16:00 |
| Testing and debugging for Bid for Section / View Bidding Cart / Drop Bid / Start and End Round | Eugene, Ming Kwang | 07:01 – 12:00 | Eugene’s laptop | No bugs found during testing. |  | 07:01 – 12:00 |
| Testing and debugging Drop Section, View Section / View Bidding Cart / View Bidding Results and JSON Login | Eugene, Cristabel | 17:31 – 19:31 | Eugene’s laptop | Renamed app folder to project requirements |  | 07:31 – 19:31 |
| Testing and debugging JSON Bootstrap Function / Dump User / Dump Table | Eugene, Ming Kwang | 09:00: – 14:08 | Eugene’s laptop | Error messages do not match project requirements.  Case of blank tokens do not produce error message. |  | 09:00 – 14:08 |
| Testing and debugging JSON Bootstrap Function / Dump User / Dump Table | Eugene, Jett Quek | 14:14 – 17:14 | Eugene’s laptop | No bugs found during testing. |  | 14:14 – 17:14 |
| Testing and debugging Student Timetable and View Student Enrolled Courses | Eugene, Jett Quek | 17:20 – 18:20 | Yew Kit’s Laptop | No bugs found during testing. | N/A | 18:20 – 20: 11 |
| Testing and debugging after deployment PAIR 1 | Eugene, Ming Kwang | 15:39 – 20:40 | Ming Kwang’s Laptop | No bugs found during testing. | N/A | 15:39 - 20:40 |
| Testing and debugging after deployment PAIR 2 | Eugene, Jett Quek | 11:30 – 16:30 | Eugene’s laptop | No bugs found during testing. | N/A | 11:30 - 16:30 |
| Testing and debugging after UAT | Eugene, Wilson Ho | 10:18 – 15:18 | Eugene’s laptop | Changed UI to reflect that when round is closed, check out cannot occur. (viewMyCart.jsp)  Changed UI to reflect min. bid amt during round 2 in viewCourses.jsp  Added method to clear minimum\_bid table during bootstrap of new data  Changed UI to reflect that bidding results can be viewed on user homepage (userHome.jsp)  Debugged counting errors in bid.csv validation for bootstrap  Debugged invalid bid amount validation in bootstrap where correct decimal values are not inserted into database  Debugged invalid section timetable clash bug to cater to validations of classes on Saturday and Sunday as well.  Changed UI for adminHome.jsp to allow admin to set start date of classes for student timetable  Added min. bid column in bidding results page for user reference  Created StudentTimetableDAO for CRUD purposes  Edited student Timetable controller to retrieve date of classes and support multiple users  Renamed URL pattern for section\_dump to section-dump | 5 | 10:18 - 15:18 |
| Testing and debugging after UAT – PAIR 2 | Eugene, Yew Kit | 10.56-3.45 | Yew Kit’s Lap top | No bugs found during testing | NA | 10.56-3.45 |
| Testing and debugging JSON Function (Bid Status) | Yew Kit, Cristabel | 11.30-1.45 | Yew Kit’s Laptop | * JSON bid status min bid not reflected correctly when round 1 has started * JSON bid status did not reflect bids of students when round 1 has started | NA | 11.30-1.45 |
| Testing and debugging Student Timetable | Wilson He, Eugene Tan | 19:30-20:10 | Wilson’s Laptop | No bug found during testing | N/A | 19:30-20:10 |
| Final test and debug on AWS | Cristabel Lau, Ming Kwang | 12:35 – 19:45 | Cristabel’s laptop | * Student could add to cart a session which exam clashed with current exam schedule * JSON bid status min bid not reflected correctly when round 1 has started * JSON bid status did not reflect bids of students when round 1 has started | 5 | 12:35 – 19:45 |