HOSTEL ROOM ALLOTMENT
TEST REPORT

Version *<1.0>*
02/04/2018

SUBMITTED BY-
ABHINAV SUTHAR(B16CS001)
NAGELLI BALAMALLESH(B16CS018)

VERSION HISTORY

Version #	Implemented by	Revision Date	Brief Description
1.0	Abhinav Suthar & Nagelli Balamallesh (GROUP-17)	02/04/2018	It's a Hostel Room Allocation Management system

TABLE OF CONTENTS

1.0   INTRODUCTION

1.1   PURPOSE

The purpose of making this test report is to find/discover defects which Have occurred during the development phase of the software.It can be Also used to check if all the functionalities are delivered as mentioned in The SRS document.

2.0   TEST PLAN

We are doing testing level specific test plans and under this we are Also following unit test plan and system test plan.

3.0 DETAILS OF UNIT TESTING

(FOR MAIN)

3.1   void main

3.1.1   Void main

3.1.2   Features to be Tested

3.1.2.1   Void main launches the main_handler and save data on exit.

TEST ID	void main ()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.1.1.1		Launch main_handler and save data on exit	Launch main_handler and save data on exit	Pass	verified

3.2   void Main_handler

3.2.1   void Main_handler
3.2.2   Features to be Tested
3.2.2.1   Checks the Launch of student, admin classes and data by entering the numericals 1 ,2 & 3 which are in the main_handler.
3.2.3   Item Pass/Fail Criteria

3.2.3.1 The software must display the respective classes by entering inputs 1,2&3.
3.2.3.2 If we enter numericals are other than 1,2&3 it shows error.
3.2.3.3 The software doesn't take string as input, if it enters it shows Error - Enter a valid Command.

TEST ID	void Main_handler ()	INTENDED RESULT	ACTUAL RESULT	PASS /FAIL	COMMENT
3.2.1.1	1	Launch student class	Launch student class	Pass	Verified
3.2.1.2	2	Launch admin class	Launch admin class	Pass	Verified
3.2.1.3	3	Save data and exit	Save data and exit	Pass	Verified
3.2.1.4	Remaining numerical value	Error: Integer wanted	Error: Integer wanted	Pass	Verified
3.2.1.5	String	Error: Enter a valid command	Error: Enter a valid command	Pass	Verified

(FOR STUDENT)

3.3 void Login

3.3.1 void Login

3.3.2 Features to be tested
3.3.2.1 Student can login with his/her username and password if it matches with that in Database.

3.3.3 Items Pass/Fail Criteria
3.3.3.1 If Student enters valid username and password than it shows Login Successful and he/she can access further options.
3.3.3.2 If Student enters invalid username and password than it shows Login Unsuccessful and he/she taken back to login again.

TEST ID	`void login ()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.3.1.1	Username: B16CS001 Password:7240505091	Login Successful	Login Successful	Pass	verified
3.3.1.2	Username: B16CS001 Password:7240505088	Login Unsuccessful	Login Unsuccessful	Pass	verified
3.3.1.3	Username: b16cs001 Password:7240505091	Login Successful	Login Unsuccessful	Fail	Username should not be case sensitive

3.4 void handler

3.4.1 void handler

3.4.2 Features to be tested
By entering the inputs 1/2/3/4 of void handler the software has to run the Specific function and has to exit if 5 enters as input.

3.4.3 Items Pass/Fail Criteria
When the User/student enters other than void handler inputs like string & remaining numerical values the software shows error.

TEST ID	`void handler()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.4.1.1	1/2/3/4	Run specific function	Run specific function	Pass	verified
3.4.1.2	5	Exit	Exit	Pass	verified
3.4.1.3	Other numerical values	Show message: `Enter a valid command`	Show message: `Enter a valid command`	Pass	verified
3.4.1.4	String values	Show error: Integer wanted	Show error: Integer wanted	Pass	verified

3.5   void getRoomDetails

3.5.1   void getRoomDetails

3.5.2   Features to be tested
3.5.2.1   By entering the room number it shows the respective room details.

3.5.3   Items Pass/Fail Criteria
3.5.3.1   If valid Room number is entered then it shows Room is present and shows room status.

3.5.3.2   If invalid Room number is entered then it shows Room is not found.

TEST ID	void getRoomDetails()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.5.1.1	20	If room is present in table then show otherwise not found	Room not found	Pass	verified
3.5.1.2	5	If room is present in table then show otherwise not found	Status of room no 5 is occupied	Pass	verified

3.6   void getEmptyRooms

3.6.1   void getEmptyRooms

3.6.2   Features to be tested
The function Shows the list of empty rooms available with help of function using bool isRoomEmpty.

TEST ID	void getEmptyRooms()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.6.1.1		Show list of all empty rooms.	Show list of all empty rooms.	Pass	verified

3.7   bool isRoomEmpty

3.7.1   bool isRoomEmpty

3.7.2   Features to be tested
By entering the respective room number it checks whether the room is present or not and occupied or not.

3.7.3   Items Pass/Fail Criteria
3.7.3.1   If student enters a valid room number it shows the room is present and occupied or unoccupied.

3.7.3.2   If student enters a invalid room number which doesn't exist in database then it shows the room is not present.

TEST ID	`bool isRoomEmpty()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.7.1.1	310	true	true	Pass	Room present but unoccupied
3.7.1.2	301	false	false	Pass	Room present but occupied
3.7.1.3	380	false	false	Pass	Room is not present

3.8   Room_getRoomObject

3.8.1   Room_getRoomobject

3.8.2   Features to be tested
By entering respective room number the RoomObject has to be returned.

3.8.3   Items Pass/Fail Criteria
3.8.3.1   If student enters a valid room number then RoomObject is returned.
3.8.3.2   If student enters a invalid room number then it shows error by saying room is not present.

TEST ID	`Room_ getRoomO bject()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.8.1.1	301	Room object is returned	Room object is returned	Pass	verified
3.8.1.2	380	Should show error of room not present	Room object is returned	Fail	I should check first room is available or not

3.9　void putRequest

3.9.1　void putRequest

3.9.2　Features to be tested

Student can put request for change/swap room **.**

3.9.3　Items Pass/Fail Criteria

3.9.3.1　If student put request with respective room number then database checks whether the room is occupied or not. If occupied it shows Room is already occupied.

3.9.3.2　if room is unoccupied then it shows Request successfully placed.

3.9.3.3　If student enters a wrong room number Which doesn't exist in database it shows Room is not available.

TEST ID	void putRequest()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.9.1.1	305	Room already occupied	Room already occupied	Pass	verified
3.9.1.2	310	Request successfully placed	Request successfully placed	Pass	verified
3.9.1.3	380	Room not available	Room not available	Pass	verified

3.10　void viewMyRequests

3.10.1　void viewMyRequests

3.10.2　Features to be tested

3.10.2.1　Student/User can check his request status if he had placed any request before.

3.10.3　Items Pass/Fail Criteria

3.10.3.1　If Student/user have placed any requests before it shows list of requests with details.

3.10.3.2　If student/User have not placed any request then it shows You don't have any request placed.

	HOSTEL ROOM ALLOTMENT				
TEST ID	`void viewMyRequests( )`	**INTENDED RESULT**	**ACTUAL RESULT**	**PASS /FAIL**	**COMMEN T**
3.10.1.1	If request for user is present	List of requests with details.	List of requests with details.	Pass	verified
3.10.1.2	If user don't have any request placed	You don't have any request placed	You don't have any request placed	Pass	verified

If user input string value instead of integer value at some points it will show error message and ask user to enter data again.

(FOR ADMIN)

3.11   void Login

3.11.1   void Login

3.11.2   Features to be tested
3.11.2.1   Admin can login with his/her username and password if it matches with that in Database.

3.11.3 Items Pass/Fail Criteria
3.11.3.1   If Admin enters valid username and password than it shows Login Successful and he/she can access further options.
3.11.3.2   If Admin enters invalid username and password than it shows Login Unsuccessful and he/she taken back to login again.

0TEST ID	void login ()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.11.1.1	Username: B16CS001 Password:7240505091	Login Successful	Login Successful	Pass	verified
3.11.1.2	Username: B16CS001 Password:7240505088	Login Unsuccessful	Login Unsuccessful	Pass	verified
3.11.1.3	Username: b16cs001 Password:7240505091	Login Successful	Login Unsuccessful	Fail	Username should not be case sensitive

3.12   void handler

3.12.1   void handler

3.12.2   Features to be tested
By entering the inputs 1/2/3/4 of void handler the software has to run the Specific function and has to exit if 5 enters as input.
3.12.3   Items Pass/Fail Criteria
When the User/student enters other than void handler inputs like string & remaining numerical values then the software shows error.

TEST ID	`void handler ()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.12.1.1	1/2/3/4	Run specific function	Run specific function	Pass	verified
3.12.1.2	5	Exit	Exit	Pass	verified
3.12.1.3	Other numerical values	Show message: `Enter a valid command`	Show message: `Enter a valid command`	Pass	verified
3.12.1.4	String values	Show error: Integer wanted	Show error: Integer wanted	Pass	verified

3.13   void getStudentDetails

3.13.1   void getStudentDetails

3.13.2   Features to be tested
3.13.2.1   Admin can check the details of student by entering respective student id.

3.13.3   Items Pass/Fail Criteria
3.13.3.1   If Admin enters a valid Student ID then It shows the Details of Student.

3.13.3.2   If Admin enters a invalid student ID then it shows No such Student ID exists.

3.13.3.3   Student ID should not be case sensitive If it is, it shows there is no such Student ID exists.

TEST ID	`void getStudentDetails ()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.13.1.1	`ID: B16CS001`	Show details of student	Show details of student	Pass	verified
3.13.1.2	`ID: B16CS044`	No such student id exists	No such student id exists	Pass	verified
3.13.1.3	`ID: b16cs001`	Show details of student	No such student id exists	Fail	ID should not be case sensitive

3.14   void getEmptyRooms

3.14.1   void getEmptyRooms

3.14.2   Features to be tested
3.14.2.1   Admin can view the List of all empty rooms available or not.

3.14.3   Items Pass/Fail Criteria
3.14.3.1   If empty rooms are available then it show List of all empty rooms.

3.14.3.2   If empty rooms are not available the it show No empty room found.

TEST ID	`void getEmptyRoom s()`	INTENDED RESULT	ACTUAL RESULT	PASS/ FAIL	COMMEN T
3.14.1.1	If empty room(s) is/are available	Show list of all empty rooms.	Show list of all empty rooms.	Pass	verified
3.14.1.2	If not	`"No empty room found`	`"No empty room found`		

3.15   void viewRequests

3.15.1   void viewRequests

3.15.2   Features to be tested
3.15.2.1   Admin can view requests placed by the Students/Users.

3.15.3   Items Pass/Fail Criteria
3.15.3.1   Admin first checks if there any request exists, if exists then admin can view the List of requests with details.

3.15.3.2   If there is no request exists it means there is No request   placed by the students/Users.

TEST ID	`void viewReques ts()`	INTENDED RESULT	ACTUAL RESULT	PASS /FAIL	COMMEN T
3.15.1.1	If request(s) exists	List of requests with details.	List of requests with details.	Pass	verified
3.15.1.2	If not	`No request placed`	`No request placed`	Pass	verified

3.16   void changeRoomStatus

3.16.1   void changeRoomStatus

3.16.2   Features to be tested

3.16.2.1   Admin will change and update the Database with the present status of the rooms.

3.16.3   Items Pass/Fail Criteria

3.16.3.1   Admin will check status of the rooms by entering room numbers.

3.16.3.2   After checking status if Status of the room is not changed in Database then Admin will update the status of the room.

3.16.3.3   If Admin enters a invalid Room number it shows Room doesn't exist(Error).

TEST ID	void changeRoomStatus()	INTENDED RESULT	ACTUAL RESULT	PASS /FAIL	COMMENT
3.16.1.1	Room_no: 306 Status: Occupied	Change status of room to occupied	Change status of room to occupied	Pass	verified
3.16.1.2	Room_no: 380 Status: Occupied	Room doesn't exist	Do nothing	Fail	Should show error

3.17   void AcceptRequests

3.17.1   void AcceptRequests

3.17.2   Features to be tested

3.17.2.1   Admin will accept requests based on the availability of the rooms by checking the status of the rooms.

3.17.3   Items Pass/Fail Criteria

3.17.3.1   Admin will check one's request by entering his ID and room number.

3.17.3.2   After that Admin will check status of the room which is requested by student/User. If the room is empty or Unoccupied then Accept requests for change/swap room otherwise rejects it.

TEST ID	`void AcceptRequest ()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.17.1.1	ID: B16CS001 Room_no: 306 Status: 0 or 1	Request status changed	Request status changed	Pass	Will not allow case sensitive value
3.17.1.2	ID: B16CS001 Room_no: 306 Status: 0 or 1	Request status changed	Error: Something bad happened try again or request doesn't exist	Fail	Will not allow case sensitive value
3.17.1.3	ID: B16CS001 Room_no: 304 Status: 0 or 1	Error: Something bad happened try again or request doesn't exist	Error: Something bad happened try again or request doesn't exist	Pass	verified

If user input string value instead of integer value at some points it will show error message and ask user to enter data again.

(FOR DATABASE)

.

TEST ID	Room_ getRoomObject()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.18.1	301	Room object is returned	Room object is returned	Pass	verified
3.18.2	380	Should show error of room not present	Default room object is returned	Fail	I should check first room is available or not

TEST ID	Student_ getStudentObject ()	INTENDED RESULT	ACTUAL RESULT	PASS/ FAIL	COMMENT
3.19.1	B16CS001	Student object is returned	Student object is returned	Pass	Verified (case sensitive)
3.19.2	B16CS044	Should show error of student not present	Default student object is returned	Fail	I should check first room is available or not

TEST ID	void setRoomStatus()	INTENDED RESULT	ACTUAL RESULT	PASS /FAIL	COMMENT
3.20.1	Room_no: 306 Status: Occupied	Change status of room to occupied	Change status of room to occupied	Pass	verified
3.20.2	Room_no: 380 Status: Occupied	Room doesn't exist	Default room object is returned	Fail	Should show error

	HOSTEL ROOM ALLOTMENT				
TEST ID	`vector<string> split ()`	**INTENDED RESULT**	**ACTUAL RESULT**	**PASS /FAIL**	**COMMENT**
3.21.1	`String: string`	Return a vector containing single words	Return a vector containing single words	Pass	Verified

TEST ID	`void getStudentFromFile ()`	**INTENDED RESULT**	**ACTUAL RESULT**	**PASS /FAIL**	**COMMENT**
3.22.1	If file is present	Copy data to student array	Copy data to student array	Pass	Verified
3.22.2	If file is present	Copy data to student array	App crashes	Fail	This happens if data in file is in wrong format or missing
3.22.3	If file is not present	Empty array	Empty array	Pass	But app will not work because app has no data to work with.

TEST ID	`void getRoomFromFile ()`	**INTENDED RESULT**	**ACTUAL RESULT**	**PASS /FAIL**	**COMMENT**
3.23.1	If file is present	Copy data to room array	Copy data to room array	Pass	Verified
3.23.2	If file is present	Copy data to room array	App crashes	Fail	This happens if data in file is in wrong format or missing
3.23.3	If file is not present	Empty array	Empty array	Pass	But app will not work because app has no data to work with.

TEST ID	`void getRequestFromFile ()`	**INTENDED RESULT**	**ACTUAL RESULT**	**PASS /FAIL**	**COMMENT**
3.24.1	If file is present	Copy data to request array	Copy data to request array	Pass	Verified
3.24.2	If file is present	Copy data to request array	App crashes	Fail	This happens if data in file is in wrong format or missing
3.24.3	If file is not present	Empty array	Empty array	Pass	But app will not work because app has no data to work with.

TEST ID	Rooms_* getRooms( )	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.25.1		Return rooms array	Return rooms array	Pass	Verified

TEST ID	Admin_* getAdmin( )	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.26.1		Return admin array	Return admin array	Pass	Verified

TEST ID	Student_* getStuden ts ()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.27.1		Return student array	Return student array	Pass	Verified

TEST ID	Request_* getReques ts ()	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.28.1		Return requests array	Return requests array	Pass	Verified

TEST ID	`void saveAllDataToFile()`	INTENDED RESULT	ACTUAL RESULT	PASS/FAIL	COMMENT
3.29.1		Save data correctly	Save data correctly	Pass	Verified
3.29.2		Save data correctly	Save wrong data if any column of array is null	Fail	We have to check if any field is empty and tell user about it or skip that data
3.29.3		Save data correctly	Save data in wrong format	Fail	Save data in correct format and correct sequence.
3.29.4		Save data correctly	Don't save any data	Fail	Permission for writing data is not granted

4.0   DETAILS OF SYSTEM TESTING

Step	Test Step	Intended Result	Actual Result	Pass/Fail
1	Select Admin/Student -> Login	Should be logged in if credentials are correct	Logged in as student	Pass
2	Login as student -> Get Room Details	Show room details if exist else show room not exist message	Show room details if exist else show room not exist message	Pass
3	Login as student -> Get empty rooms list	Show list of all empty rooms available	List showed	Pass
4	Login as student -> Put room change request	Request will be place and saved	Request placed and saved	Pass
5	Login as student -> View my all requests	List of all requests displayed if exist	List displayed	Pass
6	Login as student -> exit	User will be throw to home	User will to throw to hone	Pass
7	Select Admin/Student -> Login	Should be logged in if credentials are correct	Logged in as admin	Pass
8	Login as admin -> View all requests	List of all requests will be displayed if exist	List displayed	Pass
9	Login as admin ->	List of empty rooms will be	List displayed	Pass

	Get all empty room list	displayed if exist		
10	Login as admin -> Accept student request	Specific student request will be accepted/denied if credentials are correct	Request accepted	Pass
11	Login as admin -> Get student details	Specific student details will be displayed if Id is correct	Student details displayed	Pass
12	Login as admin -> Exit	Admin will be thrown to home	Home	Pass
13	Exit	Save data to file and exit program	Data saved and program terminated	Pass

5.0   UNRESOLVED TEST INSTANCES

TEST CASE ID	SUMMARY OF DEFECT	WHY NOT RESOLVED