**Subsystem B – Unit Test plan**

Selected Interface:

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| <<interface>>  Registration |
| +registerArea(name: str, address: str, type: str, capacity: int, contact\_no: str)  +updateRegistrationData(areaID, parameterToChange, newValue)  +viewRegistrationData(areaID) |

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| **Test Case** | **Pre-Conditions** | **Methods and Parameters** | **Expected Output** |
| New Area Registered | Area does not exist in the system | registerArea(area01)  area01 =  area(“Willow”, “36 Vanders Street, London, E17DG”, “restaurant”, 47, “07412589385”) | “Area has been registered successfully”  Area is given a random areaID which will be used to query information about it from the Area Database and also will be used to update any registration data  Returns:  01,Willow, 36 Vanders Street, London, E17DG, restaurant, 47, 07412589385 |
| Area Registration unsuccessful because Area already exists | Area has already been registered and can be queried from Area Database | registerArea(area02)  area02 =  area(“Willow”, “36 Vanders Street, London, E17DG”, “restaurant”, 47, “07412589385”) | Error: “Area could not be registered because it already exists in the database” |
| Area Registration Unsuccessful because capacity is null | Area Registration form filled in except the capacity which cannot be NULL | registerArea(area01)  area01 =  area(“Willow”, “36 Vanders Street, London, E17DG”, “restaurant”, NULL, “07412589385”) | Error: “Area capacity cannot be set to NULL” |
| Update successful | Area successfully registered in the system | updateRegistrationData (areaID, parameterToChange, newValue)  areaID = 01  parameterToChange = capacity  newValue = 59 | “Area information has been successfully updated”  Area information is updated with new capacity value and data is saved in Area database  Returns (updated data): 01,Willow, 36 Vanders Street, London, E17DG, restaurant, 59, 07412589385 |
| Update not successful because input data is invalid | Area successfully registered in the system | updateRegistrationData (areaID, parameterToChange, newValue)  areaID = 01  parameterToChange = type  newValue = 12345 | “Area information could not be updated because parameter type does not take in numbers” |
| Update unsuccessful because parameterToChange doesn’t exist | Area successfully registered in the system | updateRegistrationData (areaID, parameterToChange, newValue)  areaID = 01  parameterToChange = wallColour  newValue = “blue” | “Area information could not be updated because”wallColour” does not exist” |
| Registration data viewed successfully | Area exists in the system  Area owner logged in as they are the only ones that will be able to query data regarding their area | viewRegistrationData(areaID)  areaID = 01 | Returns:  01,Willow, 36 Vanders Street, London, E17DG, restaurant, 59, 07412589385 |