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## COS301 Mini Project Functional Testing - Space module

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### Git repository link:

[https://github.com/u12026442/cos301\\_testing](https://github.com/u12026442/cos301_testing)

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# 1 Functional Requirements

## 1.1 Login and Administrative user

### Space A

Functional Testing - for each use case tested \* either success or a list of violations of the contract requirements (pre- and post-condition violations or data structure requirements) \* a test coverage analysis reporting which percentage of the use cases have been covered by the testing

2. Non-functional testing/assessment - any performance, scalability, maintainability, reliability, usability, ... problems identified with evidence for the identified problem.

- The Buzz Space system has to accommodate and host a multitude of users concurrently, thus making it prone to various malfunctions and glitches
- The Space needs to be monitored in real time at all times to ensure relevance of topics and subject matters.
- The rating and tagging functionality need to be fair and accurate
- Sufficient feedback and updates of the Buzz Space state must be provided to the users. Users that create threads or just comment on one.
- General software control and application usage..

### Space B

Functional Testing - for each use case tested \* either success or a list of violations of the contract requirements (pre- and post-condition violations or data structure requirements) \* a test coverage analysis reporting which percentage of the use cases have been covered by the testing

2. Non-functional testing/assessment - any performance, scalability, maintainability, reliability, usability, ... problems identified with evidence for the identified problem.

## 1.2 getProfileForUser

The getProfileForUser is a critical use case in the Spaces module as it used to return the profile a user has on the Buzz Space.

The implementation of this use case is inclusive of a query service which returns the relevant profile.

Before the query is made there is a requirement that a Buzz Space exists and that a user is associated with a Buzz Space.

Thereafter the result from the query is returned with no other modifications to the Buzz Space. Detailed below is an evaluation of Buzz Space A and Buzz Space B to determine whether or not they conform to the pre and post conditions required by the getProfileForUser service contract.

### 1.2.1 Spaces A

**Pre-condition:** BuzzSpace is active

**Result:** Failure

**Discussion:** There is no apparent evidence present in the getProfileForUser use case that indicates that a Buzz Space is tested for activness/inactivess. The use case is conducted under the assumption that the Buzz Space is active, this is in the violation of the service contract pre-condition.

**Pre-condition:** User is associated to the relevant Buzz Space

**Result:** Success

**Discussion:** The getProfileForUser use case conducts the query service by ensuring that the current user being searched is associated with the respective Buzz Space.

### 1.2.2 Spaces B

**Pre-condition:** Buzz Space is active

**Result:** Failure

**Discussion:** There is no apparent evidence present in the getProfileForUser use case that indicates that a Buzz Space is tested for activness/inactivess. The use case is conducted under the assumption that the Buzz Space is active, this is in the violation of the service contract pre-condition.

**Pre-condition:** User is associated to the relevant Buzz Space

**Result:** Success

**Discussion:** The getProfileForUser use case conducts the query service by ensuring that the current user being searched is associated with the respective Buzz Space.

## **2 Non-Functional Requirements**

We identified problems with the following non-functional requirements:

### 3 Conclusion