**Smart course Management**

**System in cloud**

Test Plan Document

By

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# **Appendix A**

1. Admin

1.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| admin\_id | int | 1 |
| admin\_username | varchar(16) | admin |
| admin\_password | varchar(16) | 123456 |
| admin\_name | varchar(255) | admin one |

2. Lecturer

2.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| lecturer\_id | int | 1 |
| lecturer\_username | varchar(16) | lecturerone |
| lecturer\_password | varchar(16) | 123456 |
| lecturer\_name | varchar(255) | lecturer one |
| lecturer\_faculty | varchar(255) | CAMT |
| lecturer\_department | varchar(255) | SE |
| lecturer\_email | varchar(255) | se01@vr.camt.info |
| lecturer\_tel | varchar(32) | 0831112222 |
| lecturer\_ approvement | bit | 1 |

2.2

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| lecturer\_id | int | 2 |
| lecturer\_username | varchar(16) | lecturertwo |
| lecturer\_password | varchar(16) | 123456 |
| lecturer\_name | varchar(255) | lecturer two |
| lecturer\_faculty | varchar(255) | CAMT |
| lecturer\_department | varchar(255) | SE |
| lecturer\_email | varchar(255) | se02@vr.camt.info |
| lecturer\_tel | varchar(32) | 0832221111 |
| lecturer\_ approvement | bit | 0 |

3. Student

3.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| student\_id | int | 542115091 |
| student\_username | varchar(16) | studentone |
| student\_password | varchar(16) | 123456 |
| student\_name | varchar(255) | student one |
| student\_faculty | varchar(255) | CAMT |
| student\_department | varchar(255) | SE |
| student\_address | varchar(255) | Chiang mai, Thailand |
| student\_email | varchar(255) | se542115091@vr.camt.info |
| student\_tel | varchar(32) | 0931112222 |
| student\_ approvement | bit | 1 |

3.2

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| student\_id | int | 542115092 |
| student\_username | varchar(16) | studenttwo |
| student\_password | varchar(16) | 123456 |
| student\_name | varchar(255) | student two |
| student\_faculty | varchar(255) | CAMT |
| student\_department | varchar(255) | SE |
| student\_address | varchar(255) | Chiang mai, Thailand |
| student\_email | varchar(255) | se542115092@vr.camt.info |
| student\_tel | varchar(32) | 0932221111 |
| student\_ approvement | bit | 0 |

4. Sesmester

4.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| semester\_id | int | 1 |
| academic\_year | varchar(16) | 1\_2557 |

5. Course

5.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| course\_id | int | 1 |
| lecturer\_id | int | 1 |
| semester\_id | int | 1 |
| course\_name | varchar(255) | Math |
| course\_credit | int | 3 |
| course\_description | varchar(max) | Math is easy |

6. CourseRegistration

6.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| courseRegistration\_id | int | 1 |
| course\_id | int | 1 |
| student\_id | int | 542115091 |

7. Testing

7.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| testing\_id | int | 1 |
| course\_id | int | 1 |
| testing\_name | varchar(255) | Intro to Math |
| testing\_type | varchar(1) | 1 |
| testing\_amountQuestion | int | 3 |
| testing\_score | float | 9 |
| testing\_random | bit | 1 |
| testing\_posting | bit | 1 |
| testing\_submitTime | datetime2 | 2014-11-10 10:30:00 |
| testing\_student | varchar(max) | 542115091 |

8. Question

8.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| question\_id | int | 1 |
| testing \_id | int | 1 |
| question\_description | varchar(max) | 1+1 = ? |
| question\_choice | varchar(max) | 3#$4#$2#$1 |
| question\_solution | varchar(1) | 3 |
| question\_point | float | 3 |
| question\_type | varchar(1) | 1 |

8.2

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| question\_id | int | 2 |
| testing \_id | int | 1 |
| question\_description | varchar(max) | 1-1 = 0 |
| question\_choice | varchar(max) | True#$False |
| question\_solution | varchar(1) | 1 |
| question\_point | float | 3 |
| question\_type | varchar(1) | 2 |

8.3

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| question\_id | int | 3 |
| testing\_id | int | 1 |
| question\_description | varchar(max) | 2+1 = ? |
| question\_choice | varchar(max) | Null |
| question\_solution | varchar(1) | Null |
| question\_point | float | 3 |
| question\_type | varchar(1) | 3 |

9. AnswerSheet

9.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| answerSheet\_id | int | 1 |
| student\_id | int | 542115091 |
| testing\_id | int | 1 |
| answerSheet\_score | float | 6 |
| answerSheet\_time | datetime2 | 2014-10-20 10:20:15 |
| answerSheet\_submitResult | bit | 1 |
| answerSheet\_isChecked | bit | 1 |

10.Answer

10.1

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| answer\_id | int | 1 |
| question\_id | int | 1 |
| answerSheet\_id | int | 1 |
| answer | varchar(max) | 3 |
| answer\_point | float | 3 |

10.2

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| answer\_id | int | 2 |
| question\_id | int | 2 |
| answerSheet\_id | int | 1 |
| answer | varchar(max) | 1 |
| answer\_point | float | 3 |

10.3

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| answer\_id | int | 3 |
| question\_id | int | 3 |
| answerSheet\_id | int | 1 |
| answer | varchar(max) | 10 |
| answer\_point | float | 0 |

11. Posts

|  |  |  |
| --- | --- | --- |
| Column Name | Data type | Value |
| post\_id | int | 1 |
| course\_id | int | 1 |
| poster\_id | int | 1 |
| posts\_name | varchar(max) | “post 1” |
| posts\_description | varchar(max) | “post 1” |
| posts\_client | varchar(1) | “3” |
| posts\_recommend | varchar(1) | “0” |

# **Test case of Unit Test (UTC)**

## **UTC-104** **insertPosts (courseId: int, posterId: int, postsName: string, postsDescription: string, postsClient: postsClient): bool**

**Package:** Repository

**Class:** PostsRepository

**Unit Test Case-104:** insertPost (courseId: int, posterId: int, postsName: string, postsDescription: string, postsClient: postsClient): bool

**Description:** The test case is used for testing insertPost method in PostsRepository. This method is used for inserting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | courseId | posterId | postsName | postsDescription | postsClient |
| TD1 | 1 | 1 | “post 2” | “post 2” | “2” |
| TD2 | 0 | 1 | “post 2” | “post 2” | “2” |
| TD3 | 1 | 1 | null | “post 2” | “2” |
| TD4 | 1 | 1 | “post 2” | null | “2” |
| TD5 | 1 | 1 | “post 2” | “post 2” | null |
| TD6 | 0 | 1 | null | null | null |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |
| 2 | Test inputs course id is zero | TD2 | False |
| 3 | Test inputs posts name is null | TD3 | False |
| 4 | Test inputs posts dscription is null | TD4 | False |
| 5 | Test inputs posts client null | TD5 | False |
| 6 | Test inputs posts name, posts dscription and post client is null, course id is zero | TD6 | False |

## **UTC-105** **updatePostsRecom (postsId: int, postsRecommend: int): bool**

**Package:** Repository

**Class:** PostsRepository

**Unit Test Case-105:** updatePostRecom (postsId: int, postsRecommend: int): bool

**Description:** The test case is used for testing updatePostRecom method in PostsRepository. This method is used for updating posts for recommending in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |
| --- | --- | --- |
| Noo. | postId | postsRecommend |
| TD1 | 1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-106** **deletePosts (postsId: int): bool**

**Package:** Repository

**Class:** PostsRepository

**Unit Test Case-106:** deletePosts (postsId: int): bool

**Description:** The test case is used for testing deletePosts method in PostsRepository. This method is used for deleting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |
| --- | --- |
| Noo. | postId |
| TD1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-107** **viewPostFromCourseId (courseId: int): List<Posts>**

**Package:** Repository

**Class:** PostsRepository

**Unit Test Case-107:** viewPostFromCourseId (courseId: int): List<Posts>

**Description:** The test case is used for testing viewPostFromCourseId method in PostsRepository. This method is used for viewing a list of posts in course.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | lecturer\_ id | lecturer \_ username | lecturer \_ password | lecturer \_ name | lecturer \_ faculty | lecturer \_ department | lecturer \_ email | lecturer\_tel | lecturer\_ approvement |
| Obj1 | 1 | “lecturerone” | “123456” | “lecturer one” | “CAMT” | “SE” | “se01@vr.camt.info” | “0831112222” | 1 |

|  |  |  |
| --- | --- | --- |
| Object No | semester\_id | academic\_year |
| Obj2 | 1 | “1/2557” |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Object No. | course\_id | lecturer\_id | semester\_id | course\_name | course\_credit | course\_description |
| Obj3 | 1 | Obj1 | Obj2 | “Math” | 3 | “Math is easy” |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | post\_id | course\_id | poster\_id | posts\_name | posts\_description | posts\_client | posts\_recommend |
| Obj4 | 1 | Obj3 | 1 | “post 1” | “post 1” | 3 | 0 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs course id that has posts in course | course\_id =1 | [Obj4] |
| 2 | Test inputs course id that does not exist in database | course\_id =2 | [ ] |

## **UTC-108** **insertPosts (courseId: int, posterId: int, postsName: string, postsDescription: string, postsClient: postsClient): bool**

**Package:** Model

**Class:** Posts

**Unit Test Case-108:** insertPost (courseId: int, posterId: int, postsName: string, postsDescription: string, postsClient: postsClient): bool

**Description:** The test case is used for testing insertPost method in Posts. This method is used for inserting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | courseId | posterId | postsName | postsDescription | postsClient |
| TD1 | 1 | 1 | “post 2” | “post 2” | “2” |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-109** **updatePostsRecom (postsId: int, postsRecommend: int): bool**

**Package:** Model

**Class:** Posts

**Unit Test Case-109:** updatePostRecom (postsId: int, postsRecommend: int): bool

**Description:** The test case is used for testing updatePostRecom method in Posts. This method is used for updating posts for recommending in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |
| --- | --- | --- |
| Noo. | postId | postsRecommend |
| TD1 | 1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-110** **deletePosts (postsId: int): string**

**Package:** Model

**Class:** PostsRepository

**Unit Test Case-110:** deletePosts (postsId: int): string

**Description:** The test case is used for testing deletePosts method in Posts. This method is used for deleting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |
| --- | --- |
| Noo. | postId |
| TD1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | "Delete a posts complete" |

## **UTC-111** **viewPostFromCourseId (courseId: int): List<Posts>**

**Package:** Model

**Class:** Posts

**Unit Test Case-111:** viewPostFromCourseId (courseId: int): List<Posts>

**Description:** The test case is used for testing viewPostFromCourseId method in Posts. This method is used for viewing a list of posts in course.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | lecturer\_ id | lecturer \_ username | lecturer \_ password | lecturer \_ name | lecturer \_ faculty | lecturer \_ department | lecturer \_ email | lecturer\_tel | lecturer\_ approvement |
| Obj1 | 1 | “lecturerone” | “123456” | “lecturer one” | “CAMT” | “SE” | “se01@vr.camt.info” | “0831112222” | 1 |

|  |  |  |
| --- | --- | --- |
| Object No | semester\_id | academic\_year |
| Obj2 | 1 | “1/2557” |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Object No. | course\_id | lecturer\_id | semester\_id | course\_name | course\_credit | course\_description |
| Obj3 | 1 | Obj1 | Obj2 | “Math” | 3 | “Math is easy” |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | post\_id | course\_id | poster\_id | posts\_name | posts\_description | posts\_client | posts\_recommend |
| Obj4 | 1 | Obj3 | 1 | “post 1” | “post 1” | 3 | 0 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs course id that has posts in course | course\_id =1 | [Obj4] |
| 2 | Test inputs course id that does not exist in database | course\_id =2 | [ ] |

## **UTC-112** **intsertPosts (postInfo: Stream): bool**

**Class:** PostsManage

**Unit Test Case-112:** intsertPosts (postInfo: Stream): bool

**Description:** The test case is used for testing insertPost method in PostsManage. This method is used for inserting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | courseId | posterId | postsName | postsDescription | postsClient |
| TD1 | 1 | 1 | “post 2” | “post 2” | “2” |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-113** **updatePostsRecom (postInfo: Stream): bool**

**Class:** PostsManage

**Unit Test Case-113:** updatePostsRecom (postInfo: Stream): bool

**Description:** The test case is used for testing updatePostsRecom method in PostsManage. This method is used for updating posts recommend status in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |
| --- | --- | --- |
| Noo. | postId | postsRecommend |
| TD1 | 1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | True |

## **UTC-114** **deletePosts (postInfo: Stream): string**

**Class:** PostsManage

**Unit Test Case-114:** deletePosts (postsInfo: int): string

**Description:** The test case is used for testing deletePosts method in PostsManage. This method is used for deleting posts in database.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |
| --- | --- |
| Noo. | postId |
| TD1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs all parameters is correct data | TD1 | "Delete a posts complete" |

## **UTC-115** **viewPostFromCourseId (postInfo: Stream): List<Posts>**

**Class:** PostsManage

**Unit Test Case-115:** viewPostFromCourseId (postInfo: Stream): List<Posts>

**Description:** The test case is used for testing viewPostFromCourseId method in PostsManage. This method is used for viewing a list of posts in course.

**Prerequisites or Test Data**

**:** Appendix A

**Test Data**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | lecturer\_ id | lecturer \_ username | lecturer \_ password | lecturer \_ name | lecturer \_ faculty | lecturer \_ department | lecturer \_ email | lecturer\_tel | lecturer\_ approvement |
| Obj1 | 1 | “lecturerone” | “123456” | “lecturer one” | “CAMT” | “SE” | “se01@vr.camt.info” | “0831112222” | 1 |

|  |  |  |
| --- | --- | --- |
| Object No | semester\_id | academic\_year |
| Obj2 | 1 | “1/2557” |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Object No. | course\_id | lecturer\_id | semester\_id | course\_name | course\_credit | course\_description |
| Obj3 | 1 | Obj1 | Obj2 | “Math” | 3 | “Math is easy” |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Object No. | post\_id | course\_id | poster\_id | posts\_name | posts\_description | posts\_client | posts\_recommend |
| Obj4 | 1 | Obj3 | 1 | “post 1” | “post 1” | 3 | 0 |

|  |  |
| --- | --- |
| No. | couse\_id |
| TD1 | 1 |

**Test Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expect Result** |
| 1 | Test inputs course id that has posts in course | TD1 | [Obj4] |