1. Open url of CMS
2. User enter log-in information
2a. Failed or role is not admin
2a.1 Number of re-tries < 4
2a.2 Number of re-tries >= 4
3. Correct role
4. Admin types information of course to be Created/updated/deleted
4a. Course to be updated/deleted does not exist
4a.1 Unsuccessful creation/deletion operation
4b. Course to be created already exists
4b.1 Unsuccessful creation operation
6. Update database
7. Successful operation

1

2a.1

2

2a

3

2a.2

4

4b.1

5

4a.1

6

7