1st Iteration -   
MATCHING ALGORITHM USE CASES

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA01** | |
| **Use Case Name** | Matching algorithm (Connect to database) | |
| **Actor(s)** |  | |
| **Basic Flow** | System Response |  |
|  | Step 1: Connect to database |  |
|  | Step 2: Retrieve data from faculty and subject’s database |  |
| **Alternative Flow** | 1. At Step 3: If the username and password did not match |  |
|  | At Step 3: If mismatch occurs 3 times |  |
| **Precondition** | A faculty member was tagged. | |
| **Post condition** | It was connected to the faculty and subject database. | |

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA02** | |
| **Use Case Name** | Matching algorithm (Display retrieved data) | |
| **Actor(s)** | Admin | |
| **Basic Flow** | Actor Action | System Response |
|  |  | Step 1: Display data from the retrieved database |
|  | Step 2: Checks necessary data needed on the matching algorithm |  |
| **Alternative Flow** | Admin searches a specific subject | System displays subjects matched |
|  | Admin sorts subjects | System sorts subject |
|  | Admin searches invalid subject | System displays error message |
| **Precondition** | It was connected to the faculty and subject database. | |
| **Post condition** | Retrieved data was displayed. | |

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA03** | |
| **Use Case Name** | Matching Algorithm (Get tagged faculty and subjects) | |
| **Actor(s)** | Admin | |
| **Basic Flow** | Actor Action | System Response |
|  | Step 1: Tag faculty and subject for the next term |  |
|  |  | Step 2: Get tagged faculty and subjects |
| **Alternative Flow** |  |  |
| **Precondition** | Retrieved data was displayed. | |
| **Post condition** | Get the tagged faculty and subjects. | |

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA04** | |
| **Use Case Name** | Matching Algorithm using foreach loop (Assigning faculty as a member variable) | |
| **Actor(s)** |  | |
| **Basic Flow** |  | System Response |
|  |  | Step 1: Each faculty will be assigned to member variable |
| **Alternative Flow** |  |  |
| **Precondition** |  | |
| **Post condition** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA05** | |
| **Use Case Name** | Matching Algorithm using foreach loop (Assigning Subjects to Subject variable) | |
| **Actor(s)** |  | |
| **Basic Flow** |  | System Response |
|  |  | Step 1: Each Subject will be assigned to subjects variable |
| **Alternative Flow** |  | At Step 1: System may empty variables. |
|  | Admin mismatches specific specialization from database | System displays mismatch |
| **Precondition** |  | |
| **Post condition** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Number** | **MA06** | |
| **Use Case Name** | Matching Algorithm (Checks faculty specialization) | |
| **Actor(s)** |  | |
| **Basic Flow** |  | System Response |
|  |  | Step 1 : Checks the faculty’s specialization if it matches to the subject table. |
| **Alternative Flow** |  |  |
| **Precondition** |  | |
| **Post condition** |  | |