## Functional Requirements

The system must satisfy several requirements to provide all business logic in the organisation. ABC University requires a user log into the system to access the business logic. Also, the system needs to manage announcements, news and discussion forums. This system must provide access to the team maintenance members to test and monitor the system performance. There are 42 identified requirements that are part of the system’s functions. Table 7 contains the list of the functional requirement sorted by priority in the system and the description of each of the requirements.

Table 7: Functional Requirements in the ABC University Educational System

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| **Priority Number** | **Functional Requirements** | **Functional Requirement Description** |
| 1 | Create User accounts | Admin creates users with a user email, name and role, then the system sends an email to the user to change its password |
| 2 | Sign in Account | The user selects its role, inserts its email and password for authentication, then the system authenticates the users to access |
| 3 | Sign out accounts | Users request that its user’s session logs out, so the system signs out its account |
| 4 | Request Change password | Users request change its password, so the system requires to add a new password to insert in the database or email a default password to create a new password |
| 5 | Modify User Accounts | Users changes either its email address, address, or phone, then the system updates its data into the database |
| 6 | Test logins | Team maintenance member require login as admin, staff or student role, so the system provides a simulator to login in those roles |
| 7 | Create Announcements | Admin or Staff can create an announcement of the event, with the name, date, capacity and description, so the system saves it into the database and notify users. |
| 8 | Read Announcements | Users browsers through all announcements and select an announcement to read, then the system responds with the details of the selected announcement |
| 9 | Create Notifications | Admin or Staff broadcast a notification to a group of users, then the system sends the notification to those users |
| 10 | Read Notifications | Users require to open a notification, then the system opens the notification details to display to the users |
| 11 | Create News | Admin or Staff creates a new by adding title and description, then the system saves the new in the database and inserts in the system |
| 12 | Read News | Users can browsers through the news and request to open a new, the system finds the news to display to the users |
| 13 | Create a Discussion topic | Admin or Staff create a discussion forum, then the system creates a collection from this forum and a URL for users |
| 14 | Read the Discussion Forum | Use accesses the discussion forum, so the system loads all the topics in the discussion forum to display in the browser |
| 15 | Create a Discussion Topic | Admin or Staff create a topic with a name and discussion forum related, then the system adds the topic into the forum collection |
| 16 | Open Discussion Topic | The user selects a topic in the forum, then the system displays the information in the topic |
| 17 | Read Discussion Topic | Users browser though the topic, the system provides all data in the topic |
| 18 | Create Discussion Comments | Users can comment on a topic by adding a name and a discussion description, then the system adds the comment in the database within the topic object |
| 19 | Read Discussion Comments | User can open comments and read them, then the system will provide all comments related to a topic |
| 20 | Upload Resource | User can share its resources in the system, then the system persists these resources into the database to make them available to the other users |
| 21 | Download Resource | User can request to download any available source in the system, then the system sends the document |
| 22 | Modify Announcements | Admin opens an announcement and edit either its name, date or details, then the system updates the data |
| 23 | Modify News | Admin opens news and edit either its name or details, then the system updates the data |
| 24 | Modify Discussion Forum | Admin changes the name in the discussion forum, then the system updates the name |
| 25 | Modify Discussion Topic | Admin change the discussion topic name, so the system updates the name |
| 26 | Modify Discussion Comments | Admin change any comments contents, so the system can update the comments in the topic |
| 27 | Modify Resource | Admin can change the resources to put a new version, so the system changes the resources |
| 28 | View Statistics | Admin request the statistics of the system, so the system provides all the statistics of users, visits, announcements, news, forum and comments |
| 29 | Filter Statistics | Admin filter the statistic for view a part of the whole system statistic, the system filters the query of the statistic and provide a portion of what the admin requires |
| 30 | Create a Report | Admin or staff require a report by selecting the fields that they need; the system query the database with those requirements |
| 31 | Download Report | Admin or staff require to download the reports generated, so the system generate a file to be downloaded |
| 32 | Create Maintenance Request | A user generates a request with a name, subject and message to be sent to the maintenance team, so the system sends the request to the maintenance team and saves it |
| 33 | Read Maintenance Request | Team maintenance members require to read all the users’ requirements, so the system displays all the requirements as well each one to further inspection |
| 34 | Resolve Maintenance Request | Team maintenance members select a request as resolve, so the system update the request as solved and notify the admin |
| 35 | Delete User Accounts | Admin selects a user to delete its account, so the system removes these accounts from the database |
| 36 | Block Users | Team maintenance member block a user due to security issues, so the system updates the users as unavailable, and notify to the admin |
| 37 | Unblock Users | Team maintenance member unblock a user, so the system updates the users as available and notify to the admin |
| 38 | Delete Announcements | Admin requires that an announcement is deleted, so the system removes the announcement |
| 39 | Delete News | Admin requires that a new is deleted, so the system removes the new |
| 40 | Delete Discussion Forum | Admin requires that a discussion forum is deleted, so the system removes the discussion forum collection, with all its topics and comments |
| 41 | Delete Discussion Topic | Admin requires that a discussion topic is deleted, so the system removes the discussion topic with all its comments |
| 42 | Delete Discussion Comments | Admin requires that a discussion comment is deleted, so the system removes the discussion comment from the topic |