Analysis

Functional Modeling

**(Scenarios)**

**Scenario 1: Scenario of authorizing new users**

An administrator wants to create new users of system.

1. Administrator goes to create user page

2. Fills the required user's form:

1. User-name
2. Password
3. Role
4. Raspberries (TVs)

3. If the form filled correctly and there is no user with the same user-name, the system creates user with entered information and provides features according to the role.

Possible Alternative:

1. The Administrator filled the form incorrectly.

**Scenario 2: Post announcement**

A user (admin, manager, worker) wants to post announcement

1. User goes to create announcement page

2. Fills the required form:

1. Name

2. Description

3. Time

4. Raspberries (TVs)

5. Media file

3. Pushes announcement to the server.

4. Server saves it in the file system.

5. Saves announcement’s info to the database

6. Event Log file records this event, including all information about announcement and it's user.

7. Add media file’s title to the server media loop (playlist)

8. Shares media file with chosen Raspberry Pis.

9. Update the local Raspberry media loop (playlist)

10. System will notify the user about getting started to display media on TVs.

Media file will be deleted from the loop, after life time is exceeded.

Possible Alternative:

1. The Administrator filled the form incorrectly.
2. The valid size of file exceeded
3. The type of media is not valid
4. No available space in the raspberry SD

**(Classes)**

***Entity classes:***

* User Class - id, userName, password, role
* Role Class – title , operations
* Raspberry Class –
* Announcement Class
* Media Loop Class
* Alarm Class
* File System Class
* Data Base Class

**Boundary Classes:**

* Event Log Class
* User Interface Class

**Control Classes:**

* Media Loop Controller Class
* Share Announcement Class
* User Controller Class
* Announcement Controller Class
* Raspberry Controller Class
* Validator Class