**Use case description**

Actors ---------------------------------------------------

1) **Administrator**

*Brief Description:* One of the user-roles. The super user of the system

*Step-by-step:*

* In order to make application work there should be at least one Administrator. That's why Administrator is the first user of the application which is created by default and can't be deleted. Only Administrator creates other users and can connect to the all Raspberry Pis. He has access to all the features of application such as:
  + Authorization
  + Overview
  + Post Announcement
  + Control Pis
  + Event Log
  + Alarm
  + App Configuration

2) **Manager**

*Brief Description:* One of the user-roles. The high level user of the system.

*Step-by-step:*

* The high level user of application which has access to post announcement on all TVs and set high priority to own announcements. He can provide certain TVs to simple users. Features:
  + Authorization
  + Overview
  + Post Announcement
  + Event Log
  + Alarm

3) **Worker**

*Brief Description:* One of the user-roles. The simple user of the system.

*Step-by-step:*

* Simple user has basic function of application and access to post only low priority announcement on certain TVs provided him by Manager. Features:
  + Authorization
  + Overview
  + Post Announcement
  + Event Log

Features -------------------------------------------------

1) **Authorization**

*Brief Description:* Authentication is the process of creating new users and determining whether someone or something is, in fact, who or what it is declared to be.

*Step-by-step:*

* Administrator user is created by default
* Administrator create other users, giving them name, password, role and id
* All users enter to the system by providing id or name, and password
* If the credentials match, the process is completed and the user is granted authorization for access.

2) **Overview**

*Brief Description:* The overview use case enables all users to view the current state, work-flow of the system.

*Step-by-step:*

* View all Raspberry PI. Connection status (online or offline). Working status (idly or busy)
* View queue of waiting announcements
* View status of all users.
* View last events and news

3) **Post Announcement**

*Brief Description:* The Post Announcements use case enables all users to post their media advertisement on TVs.

*Step-by-step:*

* User fills the form:
  + Name of advertisement
  + Description
  + Choose TVs
  + Time
  + Priority
  + Media File
* Pushes announcement to the server.
* If there is no busy chosen TVs, Raspberry Pis start immediately download media file form server to the own local disk. Else, posted announcement will be waiting in a queue.
* After all chosen Raspberry Pis download the media file, system will notify the user about getting started to display media on TVs.
* If there is any posted announcement with higher priority then current announcement will be interrupted and continues after that announcement.
* Raspberry Pis will stop displaying media when time exceeded or alarm button is clicked.

4) **Control Pis**

*Brief Description:* The overview use case enables the Administrator to remotely control the Raspberry Pis.

*Step-by-step:*

* Power on or shutdown all the Raspberry Pis (Wake on LAN)
* Getting remotly acces to the Raspberry PI
* Controls the local storage of Raspberry Pi
* Install needed applications

5) **Event Log**

*Brief Description:* The Event log use case enables to trace all the posted announcements.

*Step-by-step:*

* *E*nables to look through all the posted announcements in details :
  + User that posted
  + Date
  + Name of advertisement
  + Description
  + Choose TVs
  + Time
  + Priority
* Making PDF format and print it

6) **Alarm**

*Brief Description:* The Alarm use case enables the Administrator and Manager immediately to announce the alarm over the all TVs

*Step-by-step:*

* Administrator / Manager presses the button
* All busy Raspberry Pis stop displaying advertisements
* Alarm signal is sounds and red screen is flashing over all TVs
* The audio source can be pre-installed by Administrator
* Finish when the Administrator or Manager presses stop.

7) **App Configuration**

*Brief Description:* The App Configuration use case enables the Administrator to configure some ascpects in application.

*Step-by-step:*

* User interface
* Control accounts
* Data that can be uploaded