**Individual Project: Andron Project Requirements**

Dionisio Perez-Mavrogenis

**Terminology:**

Andron Authority : A business/person that has deployed the Andron system to their facilities

**Use Cases :**

1. Facility owner wants to deploy system to their facility, process of getting it.
2. Facility owner wants to let his clients know of the system.
3. Facility owner wants to add or remove an Administrator.
4. Client wants to install the application.
5. Client wants to connect application with said facility.
6. Client wants to submit report.
7. Client wants to browse recent reports.
8. Client wants to view report info.
9. Client wants to see reports on the map.
10. Client wants to up-vote on a reported issue.
11. Allow a client to refresh the list of reported issues.
12. Administrator of said Andron Authority wants to review a report and change its status.
13. Administrator of said Andron Authority wants to block a user of the application.
14. Test administrator functionality via the web-interface as well.

**Target Operating System :** Android OS (maximal version span)

**Mobile application Requirements :**

Proposal : Have a client app and a admin app with similar functionality, but allow admins to do more. This might result in some duplication of code, but development of each will be easier and cleaner.

**Functional Requirements for client app:**

1. Read Andron Authority info through QR codes or manual insertion
2. Provide problem description
3. Provide problem details
4. Provide ability to attach picture with the report
5. Provide ability to locate position of report
6. Identify each user uniquely
7. Ability for anonymous posting
8. Provide ability to insert full name
9. Provide ability to insert email
10. Have a list of the most recent reports
11. Allow a user to add and remove a report from favourites
12. Visualise reports on a map
13. Allow users to up-vote a report

**Functional Requirements for admin app :**

1. Administrator MUST login to authenticate himself as an administrator.
2. View a report
3. Toggle the status of a report
4. Display reports on a map
5. Browse recent reports
6. Delete a report
7. Ban a user
8. Change password

**Optional Non-Functional Requirements for both apps:**

1. Have a clean, intuitive interface
2. No deep/obscure/hidden sub-menus
3. Provide help to application user, pointing them to information authorities

**Web application requirements**

The web application will be written in PHP and the database backend will be MySQL.

**Admin Interface:**

1. Add more administrators (only for the one who registered the AndronAuthority)
2. Manage administrators (only for the one who registered the AndronAuthority)
3. Toggle status of a report
4. Change account password
5. Ban a user
6. Delete a report
7. Browse reports
8. Visualise reports on a map
9. View a report
10. Remove themselves from the service (only for the one who registered the AndronAuthority)

**Non-Functional Requirements for both interfaces:**

1. Have a clean and intuitive interface
2. Don't diverge too much from the mobile versions
3. No deep/obscure/hidden sub-menus
4. Provide help to application user, pointing them to information authorities
5. Make it as HTML5 and CSS3 compliant as possible

**Proposed server architecture**

The server application running on the Andron website will be responsible for managing a set of databases, one for keeping records of the application and one for each Andron Authority.

Databases for Andron Authorities will be used to store information about reports, an administrators list (containing at least usernames, passwords and their tokens for the session – the later are for security purposes) and a blacklists of users not allowed to submit reports, possibly adding more tables if necessary.

The database for the application will hold information on AndronAuthorities (such us owner name and credentials, their QR codes, their database names, administrator credentials for logging in and possibly other information).