Annex B.

We have summarized here the research on the Internet carried out in order to compare our web application Fault Manager Lite to other similar apps already on the market. For each of these potential competitors, we have mentioned some advantages and disadvantages and extracted some useful ideas that we could adapt or integrate into our own app.

UAM Maintenance Fault Report System.

The current maintenance report system of the UAM is based on two simply forms: one for general revisions and the other one only for glass cabinets. These forms can be filled by members of the UAM community to have some facility repaired.

Source: http://www.uam.es/ss/Satellite/es/1234886352057/1242647722813/servicio/servicio/Servicio\_de\_Mantenimiento.htm

+ The user can choose the service required from a list of general services.

+ The user can specify and describe more the task he/she has asked for.

+ Provides some fields in the form which give a precise location of the problem.

- The formulary that it provides is quite basic.

- It does not let you attach a photo of the problem.

Ideas:

* Fields on the fault report formulary to specify a precise location to the maintenance staff.
* Dropdown list allows to easily choose the service required.

Issues Tracking System (ITS)

Tool developed to be used as a task manager for software development teams, which will increase their performance thanks to it. It stores issues such as bugs or requirements and then makes automatic assignments to the members of the team. Information chart and graphs can also be displayed to get an overall summary.

Source: http://www.tdcsoftware.com/?q=en/node/15

+ Magnificent software system that surely improves coordination of team members and delivers up-to-the-minute information about current issues (bugs, requirements), fostering better communication and collaboration.

+ Automatic assignment of tasks to members of the team.

+ Extremely detailed form for issues (bugs).

+ Statistic graphics that allow to get a general idea in just a quick view. Issues graphs grouped by: status, type, severity, users and priority.

+ Everyone involved in a project can obtain status, reports, charts and graphs showing trends and problem areas.

- Not user-friendly at all, as it has lots of different features and lots of details that complicate its usage for new users.

- Old-looking user interface.

Ideas:

* The automatic assignment of tasks can suit well in our app, so that the maintenance tasks would be assigned automatically to the repairmen. This may require to separate the repairmen into groups, depending on the abilities they have.
* The issues form, although seems too detailed, could give us good ideas for our fault report forms.
* The team functionality is also desirable, as all the members of the technical staff would have access to up-to-the-minute information of pending and solved faults. This would solve coordination problems.
* The system statistics and summary charts could be useful to detect problem areas that should be revised more often.

Clean Up Control

This application is used to manage the quality control of the cleanse service in any kind of area, no matter its structure. It saves information about every inspection made and shows the cleanse levels of each zone, giving more priority to those that have failed the inspection or it is still pending.

Source: http://www.fourtrack.biz/documents/castella/Clean-Up%20Control.pdf

+ Profile information about clients, inspectors and managers.

+ Two modules: PC and PDA app (mobility...).

+ Locations organised in a tree structure, which makes easier to find them in the app.

- Synchronization between the PC and the PDA requires direct cable connection or a modem accessory for the PDA (... but not so good)

- Obsolete user interface.

- Does not cover any kind of team coordination.

Ideas:

* Organising all the locations in a tree structure is a good idea.
* The revisions of problem areas could be timetabled in the same way as they are in this application.

Línea Verde

This website includes an Intranet for the town council, through which the incidents and facilities faults stated by the citizens are managed. Furthermore, it includes the visualizations of statistics and reports of the management.

Source: http://www.lineaverdemunicipal.com/Default.aspx

+ Great mobility, being accessible by their website and also by smartphone (IOS and Android apps are available).

+ Automatic geolocation of the user when he/she sends a report.

+ Photo of the problem can be attached to your report.

+ Incidents are organised into different types to make easy to specify your problem.

+ Simple and user-friendly report system.

- Closed categories of faults stop the user from reporting any other kind.

Ideas:

* Faults hierarchy or main categories into which we could organise our installations faults.
* Mobility (tablets, smartphones), geolocation and photo of the fault are already features we were planning to add to our system.

Reparaciudad

This extremely user-friendly application allows the user to report an incident in any street of Spain, choosing its typology and describing or uploading a photo of it. It also has at the users disposal a map containing the incidents reported by everyone, which serves to detect problem areas very easily.

Source: http://reparaciudad.com/

+ Complete mobility, as the service is offered in PCs (internet browsers), but also on smartphones app (Android, IOS, Blackberry and Windows Phone platforms).

+ Hierarchy of incidents.

+ It shows a map with icons which represent the last incidents reported. Moreover, it also shows some useful information about those reports (type, date, exact location, status and other comments).

- Registration is needed in order to report incidents.

Ideas:

* The map of the incidents is a superb idea which we will try to add to our system.
* The report system allows voting, which could give us an idea of the users that want that incident to be fixed.

In Situ Murcia (Murcia council fault report website)

The town council of Murcia offers in this website a way to report any kind of incident or fault in the facilities of the city and request their repairs. This website goal is similar to reparaciudad, but limited to incidents in the region of Murcia.

Source: http://www.insitumurcia.es/

+ No login needed, you just have to introduce your email and mobile phone number in order to send a report.

+ Very user-friendly and modern website.

+ It shows a map with icons which represent the last incidents reported. Moreover, these icons follow a colour code depending on their current status.

- No mobility alternatives.

- It is mandatory to send your geolocation in order to report an incident, becuase the service is limited to the region of Murcia.

Ideas:

* The colour code of the icons in the map make it possible to get a general idea of the faults status in just one look.

Madrid council fault report website.

The town council of Madrid offers in this website a way to report any kind of incident or fault in the facilities of the city and request their repairs. This website goal is similar to reparaciudad, but limited to incidents in the region of Madrid.

Trying to access this website, it says that we need some special certificates (electronic DNI) to report any kind of incident, so we have not been able to see the forms.

+ Nothing.

- Requires authentication with special certificates, which makes most of the people to leave the website instead of reporting faults of their city.

- Apart from links to two forms (which we could not access to), this website does not offer anything more: no map with incidents, no faults history, nothing special.