# **Dandelion Workshop 1 – Functional Requirements**

# **Aim**

Get user perspective on functional requirements and early design requirements of the system.

# **Functional Requirements**

* Common experiments and local experiments – common being global experiments being provided by Dandelion.
* Superuser Dashboard
  + Alerts for reports to teachers. Superuser can send alerts to specific groups.
    - Alerts – new content, experiment report deadline, missing data collection fields/timelines, weekly alerts (‘jobs this week’).
  + Newsfeed on superuser dashboard.
  + Create local project. Edit project.
  + Number of projects completed/in progress/not started.
  + Student list.
  + Node Health Monitor.
  + Pupil activity monitor – which experiments are which classes/pupils doing?
  + Display which projects are collaborative.
  + Tips for best connectivity to sensors.
* Teachers must have the ability to review pupil activity. Names are kept private, use a username format?
* Qualitative data - collect attitudinal data. Mostly around the growing process - ‘how did it make you feel?’, ‘What does it taste like?’
  + Teachers add qualitative questions themselves to be asked at the end of a project. Is it only asked once or throughout?

## **Actions**

-Consolidate superuser features.

-Create sitemap.

-Create user stories.

# **Design Implications**

* Accessibility
  + Accessibility for charts – greyed out/colour blind.
  + Pupil friendly input fields – keep terminology in label, simply for suggestive text.
  + Accessible design for ASN schools.
* Reframe ‘add data’ to scientist observation page – student engagement.
* Internal calendar in case students don’t submit their data on the day.
* Validation – allow teachers some layer of control, set boundaries etc. Popup box with signposted data.
* Map pop-up - include experiments that the school is taking part in.

## ***Actions***

-Follow up on ASN design guidelines.

-Create a map pop-up modal for the 12th.

-Create admin dashboard wireframes/prototype.

-Create several add data page wireframes as alternative.

# **Client Insight**

## **Experiments**

* **Are there any other aspects of experiments that need to be included?**
* **What information needs to be captured to define/describe and experiment?**

*Visual and taste and smell descriptions (qualitative data), visual records (photos), measurement facts from sensors.*

* **What types of observation data does the app need to handle?**

*Measurements from sensors connected to the cubes and done manually.*

* **How should the experiment definition page be laid out?**

*Allow schools to define their own variables/experiments. Data visualisation – schools will need to sort by their own school.*

## **Data visualisation**

* **What search strategies do you expect users to employ when they are looking for a certain type of data?**

*Schools will need to be able to search internally. Successful plants – from which seeds or seedlings; health ratings; taste ratings.*

* **How should the search and browse pages be laid out?**

*Search and browse – general terms, not in-depth exploration. From micro to macro – class to national dataset.*

* **What sort of charts would you expect to be available?**
* **What interactive features would you like the charts to have?**

## **Projects**

* **What information should be used to define/describe a project?**

*Have project/experiment templates available for the superuser.*

* **Are collaborative projects a good idea?**

*Yes - "Class 3's" or "Growth for Good Taste", "Dundee Schools" etc.*

## **Roles**

* **Public**: anonymous user who can access the collected data
* **School user**: student or staff member in a participating school
* **Project participant**: student of staff member who is contributing to a project
* **School superuser**: staff member with responsibility for managing a school’s data
* **Sysadmin**: the overall system administrator who manages non-school data
* **Is this list of roles adequate?**
* **Are any of these roles unnecessary?**
* **What specific functions would each role need?**

*News feed to superusers about new video items, for example. Sysadmin would have to be asked to set-up inter school projects.*

# **General Front-End Agenda**

* Create a sitemap.
* Expand on existing wireframes, more animations between pages and more interactivity for the client. Create a map pop-up modal.
* Extrapolate superuser features as a design and develop wireframes/prototype.
* Create several ‘add data’ wireframes.
* Create user stories.

# **Front-End Long-Term Agenda (12th Jan)**

* Have a fully finished version of the prototype available for the client.
* Have several versions of the ‘add data’ page created for review.
* Have the admin dashboard prototype completed.
* Create a document (.pdf) with design options for client review.