
COMPILERS CHECKPOINT I REPORT

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1 Requirements

1.1 Definitions

The terms used in the requirements document are defined as follows:

1. **ARET** – The Agricultural Research and Extension Trust of Malawi.
2. **SMS** – Short Message Service. A service on cell phones that allows the exchange of short text messages.
3. **API** – Application Programming Interface. A set of tools that allows applications to interact with each other.
4. **SQL** – Structured Query Language. A language that allows the definition and manipulation of data.
5. **GUI** – Graphical User Interface. A visual framework that enables easy interaction with an application.
6. **System Administrator** – A member of ARET responsible for administering user profiles and maintaining the database and API. They also will have communication with the development team, and report structural changes the database and/or API.
7. **Researcher** – A member of ARET responsible for creating and managing research projects within the system. Additionally, they will be reviewing the materials created by the Extension Officer to make sure they are scientific.
8. **Extension Group** – A member of ARET responsible for using the results from the research projects and creating information that will be disseminated to the farmers from Agents and Officers.
9. **Extension Officer** – A member of ARET responsible for communicating with the Extension Service within the system and disseminating information to their respective Agents.
10. **Extension Agent** – A member of ARET responsible for communicating with their Extension Officer within the system and disseminating information to the Farmers within

their region.

11. **Farmer** – A farmer of Malawi responsible for using the mobile application to track their farm statistics, receive notifications from ARET members, and send responses to surveys from ARET.
12. **Public** – Anyone who is using the web application but is not one of the defined users. This could be potential donors, partners etc.
13. **System** – The entire system as a whole, including the web portal, mobile application, database and API.
14. **API Key**–A unique string generated by the system and distributed to an external application, that allows the system to authenticate the application and provide it access to the API.
15. **Notifications** – Push notifications from the system to the mobile application on the user's device.
16. **Field Size** – The length and width of the farmers field. Measured in square meters.
17. **Security criteria** – Constraints that the user's passwords must satisfy, such as the presence of capital letters, or numbers.

2 References

- World Food Programme (2016). *Malawi*. Retrieved from <https://www.wfp.org/countries/malawi>
- Agricultural Research and Extension Trust of Malawi (2016). *About ARET Malawi*. Retrieved from <http://www.aret.org.mw/index.php/about-us/profile>
- Agricultural Research and Extension Trust of Malawi (2016, January). *ARET Strategic Plan 2016-2021*.