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To the Kind Attention of:

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“Aquarius” (a.k.a. HydroApp) Proposal

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Purpose

Develop a highly user-friendly guide for building & operating low-cost hydroponic systems that can be used to either generate new income or supplement diets in low-income urban settings, emergency and/or refugee situations that suffer from food, water and land scarcity. The systems shown could also be scaled allowing for the creation of both small farming enterprises and local economy.

Scope of Work

Web application that enables people to learn and apply the simplified hydroponic cultivation technique. The application will also provide tools to improve eating habits, access local markets, further grow hydroponic knowledge, exchange with hydroponic community and access to experts in related fields.

Target of Work

The target of this work initially is men and women living in La Ventanilla in Callao, Lima, Peru who have graduated from a WFP hydroponics workshop. More broadly, this project is targeting vulnerable groups living in WFP focus countries.

About Us

Isabel Technologies' (Isabel) mission is to deploy the most cost-effective & resource efficient urban farms around the planet. Isabel operates its own hydroponic greenhouse in the San Francisco Bay area and services area restaurants with direct to consumer sales. Team Isabel has decades of combined experience in controlled environment agriculture, business development, software and hardware development, UI/UX design, food distribution and food service.

Terms

- Materials suppliers database - database of materials such as seeds, nutrients, etc.
- Inventory - crops already planted or grown by a person and registered in "Aquarius" interface.
- Aquarius Moderator – person who moderates Inventory and recipes.
- Aquarius Administrator – person who manages Materials suppliers database, Aquarius Moderators list.

Technical Background and Requirements

- Text description of basics of hydroponics.
- Hydroponic manual - text and video instructions:
 - steps of cultivation process;
 - Grow cycle scheduling tool
 - Nutrient Deficiency Key & Disease Identification
 - pH and EC testing instructions
 - Nutrient Mixing instructions
 - Basics on Integrated Pest Management (IPM)
 - cultivation techniques;
 - Materials & Systems Typology
 - table of cultivation.
- Materials suppliers database that will be managed by Aquarius administrator, who will be able to add new suppliers, edit and delete records in the suppliers table.
- Marketing subsystem that will enable Aquarius user to create and edit marketing profile (including contact phone, e-mail, address), register and edit/delete Inventory. Inventory will be moderated by Aquarius moderator. Inventory of particular user will be visible to other users of Aquarius .

- Recipes and experience sharing subsystem that will enable users to create/edit/delete recipes on how to create/cook with hydroponic products and notes describing experience of growing particular crops. Aquarius users will be able to comment recipes and notes. Aquarius moderator will have instruments to review and moderate recipes, notes, and comments.
- Expert section where any Aquarius user will be able to ask question on hydroponics and get answers from experts.

Duration of Work and Resources

This unit of work is expected to take 20 weeks total. For accelerated delivery, deliverables can be worked on simultaneously.

Cost of Services

**The budget below is rough estimation and may change during the detailed requirements gathering and design in case of significant scope change.*

Project Scope and Budget

We see the project is comprised from following iterations:

Iteration	Deliverables	Duration	Price (USD\$)
Additional Illustrations for Systems Typology	Graphic Content for manual sections	2 weeks	6000
Design & Implementation of UI	Both Design and Implementation of UI	2 weeks	6000
Development of Basic of hydroponics and Hydroponics manual sections.	Basic of hydroponics web pages.	2 weeks	3000
Continuation of development of hydroponics manual section.	Hydroponics manual web pages.	2 weeks	3000
Development of Materials suppliers database.	Web pages enabling to manage and search for materials suppliers.	2 weeks	5000

Development of marketing subsystem components.	Web pages for registering merchants, registering inventory, marketing profiles.	2 weeks	5000
Development of recipes and experience sharing subsystem.	Web pages enabling users to share recipes, experience of growing, and comments.	2 weeks	5000
Development of expert section components.	Web pages for questions to hydroponics experts.	2 weeks	3000
Development of HydroApp components for Moderators and Administrator.	Moderator tool and Administrative web pages.	2 weeks	3000
Solution testing, adoption for mobile devices, and preparing for release.	Hydro App web application ready for deployment.	2 weeks	3000
Total		20 weeks	42000 USD

Intellectual Property Considerations:

World Food Program (WFP) will retain the copyright of the content provided by Isabel. WFP will be always reported as the copyright owner of all the work produced. Isabel maintains the right to use the work provided for personal use only.

Thank you for your consideration:



Eric Hager/Chief Executive Officer

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