Agri Helper

openSAP - Imagine IoT Challenge
User Story – Agri helper

• The user is always away from the computer and needs on-the-fly information about the different fields and plants he has.

• Fields can be visualized and planned. The activities are automatically generated (with dates) according to the selected plants. The user can see the planned activities, add new and mark them as done. Possible activities are: Sowing, Seeding, Pesticiding, Checks, Harvesting.

• Harvesting results can be entered and different statistics will be calculated based on these results.

• The user can see information about different plants and decide what to plant.

• The user bought new soil sensors which help him get information about the humidity and the quality of the soil.
Persona – Agri Helper

Name: Michael

Background: 35. Married with 2 small children

Job Title / Role: Farmer

"For me, I would like to...”

Handle the plants better and harvest more

Main responsibilities:

- Plant the right combinations of plants
- Plan the different activities
- Harvest the plants

Main goals:

- Handle the plants better
- Produce more
- Keep the soil quality on a high level
- Combining the plants
- Non predictable weather conditions that affect the soil
- Transparency of the activities

Needs:

- See the location of the fields and the planted plants
- Have an overview of the soil quality
- Log the harvesting results

Stakeholders:

Main persons in contact during work:

Customers, Other Farmers

competencies:

Casual User (---)

Power User (---)

Proactive (---)

Reactive (---)

Work in team (---)

Lone Fighter (---)

Global focus (---)

Local focus (---)

Innovative (---)

Conservative (---)
User Journey – Agri Helper

Current User Experience Journey

**Mindset**
What is on the Persona’s mind while taking the actions of their journey? How do they feel each step of the journey?

- I need to plant
- The plants are all good 😊
- What? Bugs on the plants?
- Harvesting season ended
- Have less seeds for the field?
- Plants are dry?
- One plant is destroying the other?

**Actions**
What actions and activities does the Persona take while going thru the journey to achieve their goal?

- Seed
- Pesticide
- Plan activities
- Follow harvesting results
- Harvest
- Check the plants
- Input harvesting results

**Touch points**
What touch points does the Persona have? (Tools, channels, devices, conversations, and so on.)

- Vehicle
- Phone
- Tablet
- Soil Sensors
- Navigation device
- Maps
- Plants
- Field
Michael, the Farmer needs a way to quickly enter harvesting results so that he can concentrate on improving the delivery process of the goods.

Michael, the Farmer needs a way to visualize the fields so that he better plan the plants to be planted.

Michael, the Farmer needs a way to get informed about combining the plants so that he can better organize the planting activities.

Michael, the Farmer needs a way to get information about the soil so that he can react better in case its quality drops and the plants are affected.
Agri Helper Study links

Prototype:
https://standard.build.me/api/projects/2836505f8e67896e0cd471eb/prototype/snapshot/latest/index.html#/1458688637841_S0

Study:
https://standard.build.me/home/projects/2836505f8e67896e0cd471eb/research/participant/4359f01c85de57ae0cd47a75

If they don‘t work continue to the mock-ups...
Field Information

Cherry Tomato/Potatoes

<table>
<thead>
<tr>
<th>Activity</th>
<th>To be done by</th>
<th>Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeding</td>
<td>Michael</td>
<td>01.03.2016</td>
<td></td>
</tr>
<tr>
<td>Planting</td>
<td>Peter</td>
<td>05.03.2016</td>
<td></td>
</tr>
<tr>
<td>Watering</td>
<td>Lukas</td>
<td>12.03.2016</td>
<td></td>
</tr>
<tr>
<td>Check Soil</td>
<td>Lukas</td>
<td>15.05.2016</td>
<td></td>
</tr>
</tbody>
</table>
Cherry Tomato/Potatoes

Harvested Amount: 

Harvested Plant: 

Harvested On: Enter a date or date and time...

Save Harvesting Result

Harvesting Results

<table>
<thead>
<tr>
<th>Plant</th>
<th>Harvested On</th>
<th>Harvested Amount</th>
<th>Harvested By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Tomato</td>
<td>12.03.2016</td>
<td>40 KG</td>
<td></td>
</tr>
<tr>
<td>Cherry Tomato</td>
<td>15.03.2016</td>
<td>30 KG</td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td>18.03.2016</td>
<td>55 KG</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Area (ha)</td>
<td>Stage</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Cucumber/Beans</td>
<td>2,000</td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Artichoke</td>
<td>540</td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Rhubarb</td>
<td>350</td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Spinach/Lettuce</td>
<td>450</td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Asparagus</td>
<td>500</td>
<td>Seeded</td>
<td></td>
</tr>
<tr>
<td>Beetroot</td>
<td>100</td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Herbs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Field Information

- **Cherry Tomato/Potatoes**

<table>
<thead>
<tr>
<th>Message</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>The humidity is high</td>
<td>12.05.2016</td>
</tr>
<tr>
<td>There is a need to add more vitamins in the soil</td>
<td>15.05.2016</td>
</tr>
<tr>
<td>The soil is dry</td>
<td>17.05.2016</td>
</tr>
<tr>
<td>Methane levels too high</td>
<td>18.07.2016</td>
</tr>
</tbody>
</table>
A cherry tomato is a rounded, small fruited tomato thought to be an intermediate genetic admixture between wild currant-type tomatoes and domesticated garden tomatoes. Cherry tomatoes range in size from a thumbtip up to the size of a golf ball, and can range from being spherical to slightly oblong in shape. Although usually red, yellow, green and black varieties also exist. The more oblong ones often share characteristics with plum tomatoes, and are known as grape tomatoes. The berry tomato is regarded as a botanical variety of the cultivated berry, *Solanum lycopersicum var. cerasiforme*. 
### Cherry Tomato

#### General Info

<table>
<thead>
<tr>
<th>Title</th>
<th>2015 – 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon...</td>
<td>heute</td>
</tr>
<tr>
<td>Dezember</td>
<td>Januar</td>
</tr>
</tbody>
</table>

- Tomato: March
- Green Activity: February
- Red Activity: April

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**Note:** The calendar view shows the timeline for planting and activities for Cherry Tomato from December 2015 to May 2016.
## Cherry Tomato

### Compatible Plants

<table>
<thead>
<tr>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potatoes</td>
</tr>
<tr>
<td>Lettuce</td>
</tr>
<tr>
<td>Spinach</td>
</tr>
</tbody>
</table>