VSD-OCSE Activity - Team P02

STEP A: Envision

A1.

- **Farmers**: the application could give more visibility to the farmer but in case system mail functionality could reduce the trust of the clients toward the farmer
- **Clients**: the trust towards the farmer must increase and problems can arise if a farmer is not honest
- **Shop employees**: more responsibilities since she has to deal with both real and virtual environment (especially related to the management of money)
- **Warehouse manager**: Time constraints introduced by the software could lead to errors in the delivery chain which implies a bad service for the clients
- **Warehouse worker**: Similar to the warehouse manager case
- **Manager**: more complex management since a lot of personal data are involved and a lot of regulations.

A2.

- **Farmers that are not part of the application**: the software could reduce the sellings of the farmer because of new competitors which are stand up by the application
- **Delivery people**: since the deliveries are done just on three days, this cannot be a full time job
- **Planet**: reduced environmental impact since the products and clients are all local, the delivery chain is optimized. On the other hand the use of servers for the application can lead to a big use of resources that have an impact on the planet.

STEP B: Speculate

B1.

- **Freshness of food**: good condition of products.
- **Fairness of price**: the price of the products should respect quality and amount of work from farmers/employees.
- **Punctuality**: all stakeholders should respect time constraints for the quality of the service.
- **Privacy**: data about the stakeholders should remain inside the platform and be used only for defined purposes.
- **Human welfare**: people are able to eat local, healthy and traceable food.

- **Universal usability**: anyone can use the service either by using the app from remote or with the direct assistance of a shop employee in the shop.
- **Trust**: any stakeholder in the process has expectations about other ones and bases his activities on the results of others' activities.
- **Accountability**: the actions taken on the platform are traced uniquely to the involved parts.
- **Autonomy**: apart from time constraints, any stakeholder can plan and choose to perform the actions in a way it will help achieve their goals.
- **Environmental sustainability**: the application involves only local people/products and this minimizes environmental damage.

B2.

Freshness of food:
- from the time when a product is ready to be eaten, it should arrive as fast as possible, in a good condition, to the client
- when a farmer decides to sell food, it should be in a good condition.

STEP C: Explore
C1.
- Freshness of food.
- Trust.
- Fairness of price.

C2.
- **Punctuality - Autonomy**: autonomy is limited by punctuality as it constrains how the stakeholders can decide and act to be part of the process. In our application, we value punctuality more than autonomy because it increases the quality of the service.
- **Freshness of food - Environmental sustainability**: if the freshness of food is required, a larger use of vehicles is required for moving the products on time. This leads to a decrease in environmental sustainability.
  In our application, we value the freshness of food more because any component of an order can be delivered separately.
- **Privacy - Accountability**: if you want to trace and be accountable for all the actions performed within the system you need to lose a bit of privacy.
  In our application, we value accountability more because everything can be retrieved at any moment and this offers a richer service to the users.

STEP D: Adapt

D1.

- **Punctuality - Autonomy**: a possible design feature to mitigate the autonomy is to establish a parallel process in which the farmer delivers his own products directly to the customer.
- **Freshness of food - Environmental sustainability**: a possible design feature to mitigate the effects on the environment is to group orders and avoid too many vehicles for transporting food. Another possibility would be to schedule pick-ups also for farmers and in this way to optimize delivery to the warehouse avoiding too much environmental impact.
- **Privacy - Accountability**: a solution could be selecting only a few trusted people with access to these data. Moreover, all the stored data should be encrypted in order to allow accountability but at the same time avoid the risk that sensitive information is leaked.

STEP D: A look into the future

E1.

- Extend the infrastructure, creating a **virtual flea market** with local products. For example, a person can insert in the application an old book she doesn't need. Another user can buy it and ask for a delivery to her house. This avoids creating unnecessary waste and people can create value from items that they don't need anymore.
- In case the system becomes more and more popular, the undelivered products (that will increase in number since the application has many more users) can be given to some **local charity association** (e.g, Caritas) in order not to waste food and at the same time give some high-quality food to people that really need it.

E2.

- **Universal usability - Autonomy**: to avoid huge traffic on specific days of the week the time constraints are removed. In this way, there are no limitations in placing an order and the requests from the clients are more distributed during the week.
- **Environmental sustainability**: thanks to the avoidance of undelivered food, this value will change to **Environmental and social sustainability**, since we are directly helping local people.