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JustEat Takeaway x Saxion

Group 4 - Mammals

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# Project Statement

This project was created by request of a formal client. In this document, we will cover why out project was formed and what we would like to achieve as a result. The following topics will be covered:

* The client
* The team
* Current situation
* Problem description
* Project goals
* Deliverables
* Non-deliverables
* Constraints
* Risks

## Formal Client

Contact with the client will be done strictly through email between Takeaway’s contact person, Gina van Berkel.

**Contact person**

Gina van Berkel

Contact information

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## Team

**Contact person**

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**Team members**

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## Current Situation

JustEat Takeaway.com is a leading online good ordering platform, focused on connecting consumers and restaurants through its platform in over 12 countries. JustEat Takeaway.com offers an online platform where supply and demand for food delivery and ordering come together.

The company started operations in 2—when its CEO, Jitse Groen, founded and launched one of the world’s first online food ordering platforms, Thuisbezorgd.nl, in the Netherlands.

## Problem Description

Since last year, Takeaway has its own couriers delivering food for restaurants that do not have in-house delivery service, e.g. Burger King, McDonalds, etc. The client would like to narrow the communication gap between the drivers and the consumers by mean of an application.

## Project Goals

For this project, Takeaway is expecting a text-chat based for Android platform, which will allow the courier to directly message the customers to receive additional directions, and also for the customer to communicate with the driver as well.

* A Project Plan
* A Setup Document (Technical and Functional Design)
* An application:
  + That support the communication between couriers and customers
  + That show the status of the users
  + That allows couriers to mark orders as delivered
  + That cache messages when network is unavailable, and send the cached messages when connection becomes available again
  + That supports multi-languages
  + That allows customers to create an account directly from the app
* A database:
  + That stores the information of customer’s accounts
  + That stores the information of courier’s accounts
  + That stores the information of order’s details

## Constraints

**Constraint 1: Project must be finished by [DATE]**

The time allotted might not be sufficient for the team to integrate and keep evolving the application’s functionalities

**Constraint 2: Language of the application**

English will be prioritized for this project. For additional languages, they will be put under consideration based on the progress of the project during the building process. Moreover, constraint for time will also affect the integration of other languages.

Constraint 3: Human resources

Since the team only consists of 4 members building an application in the span of *few months,* the work will have to be divided equally among team members. Furthermore, this constraint in manpower will likely put more time pressure on the team.

## Risk Assessments

**Risk 1: Developers’ inability to meet the client’s needs**

Probability: High

Severity: High

Description: As a team consists of 2nd year students from the ICT program, the team members are still lack of experience with actual projects and knowledge.

Preventive measures: The team will need to put effort into learning new things on their own, requesting for help from mentor when needed, and especially forming a clear communication with the client for requirements.

**Risk 2: Resistance to changes from team members**

Probability: Moderate

Severity: High

Description: Since there are 4 members on the team, and each member has their own opinion, it is highly likely that there will be conflicts between members when implementing the project.

Preventive measures: The team will be sure to form an agreement within each other, also to decide on how conflicts will be resolve, as having these problems can consume a great amount of time.

**Risk 3: Focusing too much on implementing one task**

Probability: High

Severity: High

Description: A common risk among projects, as members would want to perfect a functionality before moving on to the next one.

Preventive measures: Setting out a clear deadline for tasks, make sure that members will stick to it.

**Risk 4: Not meeting with deadlines from the client**

Probability: Low

Severity: Very High

Description: As there are limited time for the project, and capability of members varies, there is a minor chance that the project could not be finish in time.

Preventive measures: This is highly unlikely to happen, all members will have to strictly stick to the set deadlines, not meeting the deadlines will results in consequences decided as a group.

# Project Phasing

In this section, we will describe the planning of our project, with significant activities and milestones.

Figure 1 is a visual overview of the activities, their dependencies, and the milestones:

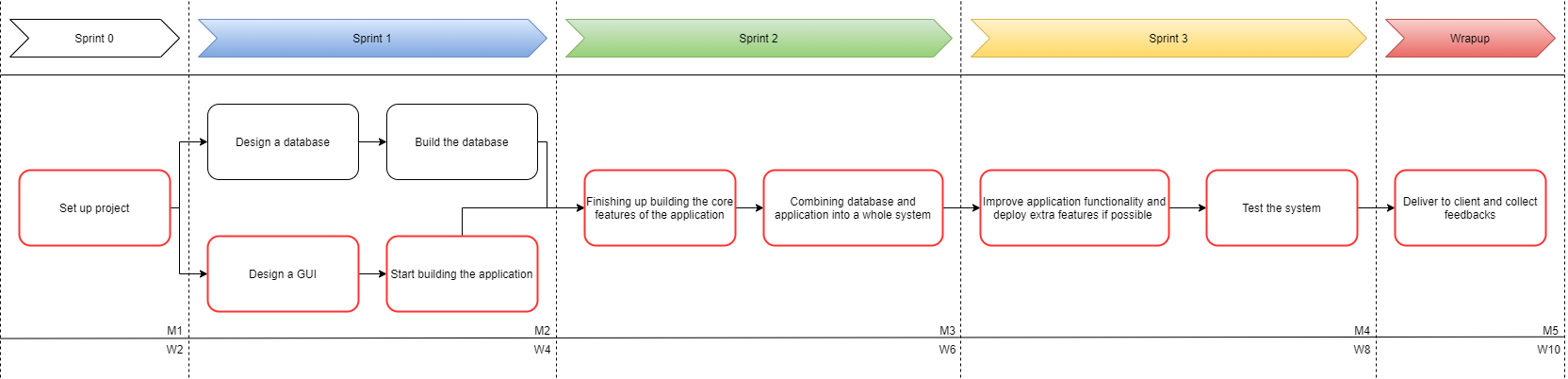
* The critical path is made bold red.
* The total project will take 10 weeks to complete.

Figure 1

## Sprint 0: Initiation Phase

The initiation phase has only one activity, ‘Set up project’.

Activity: Set up project (2 weeks)

1. Get critical information of the project (incl., but not limited to, asking questions about requirements, specify the scope of project, code of conduct, etc.)
2. Devise a plan
3. Set up meeting with the client to ask questions prepared
4. Create a rough draft to visualize the application
5. Create project plan
6. Create project proposal for client

Estimated duration for the first sprint of the project is 2 weeks.

Deliverables for **Sprint 0** are:

* Rough draft of Project Plan
* Code of conduct between the team members
* Visual of the application

**M1** is to prepare a general plan for the project.

## Sprint 1: Design and Implement

This phase is made up of 5 activities: design a database, an application, start implementing the basics of the database, the application, and finishing the first version of the project plan. For each activity, the tasks are as described below.

Activity: Design a database (4 days)

1. Draft up an ERD of the database required for the system
2. Research and decide which database will be used for the Android application
3. Finalize the design accordingly to the database chosen (Horizontal or Vertical DBMS)

Activity: Design the application (5 days)

1. Design the GUI
2. Discuss functionalities
3. Read through brand’s identity, provided by the client, to visualize the theme
4. Finalize the design

Activity: Build the database (1 week)

1. Setup Firebase for Android application
2. Learn about different services will be implementing in the application
3. Read up on cloud messaging service and how to integrate into the app

Activity: Start building the app (1 week)

1. Install required software, if have not
2. Implement models
3. Design layouts for application

Activity: Finish the first version of Project Plan (3 days)

1. Put all the newly acquired information from the client and mentor to finish the first version of Project Plan
2. Draft out Technical Document

Estimated duration for sprint 1 is 2 weeks.

Deliverables for **Sprint 1** are:

* Project Plan for mentor
* Project Proposal (incl. UML, project phasing, ERD, etc.) for client

**M2** is to review the Project Plan and draft up Technical Document.

## Sprint 2: Implementation and Integration

For this sprint, there are x activities: finishing the application main features, and combining the database with the application, finishing documents.

Activity: Finish building main features of the application (10 days)

1. Implements necessary methods that were overlooked during the previous sprint
2. Make sure activities are well connected and not crashing in between
3. Check the User stories to see if all issues with Must haves’ and Should haves’ labels are closed
4. Runtime tests
5. Fix bugs
6. Update documents

Activity: Integrate application with database (4 days)

1. Combining the application and the database
2. Check for errors

Activity: Finishing documents (3 days) *check which documents are required*

1. Update the document accordingly (?)

Estimated duration for **Sprint 2** is 2 weeks.

## Sprint 3: Review and Testing

The following phase has 3 activities: Implement selected extra features, test the system, make process report

Activity: Implement selected extra features

1. Assess the current situation of the project
2. Select features that can be integrate into the project without causing conflicts
3. Implement extra features

Activity: Test the system

1. Test the application’s functionalities
2. Write tests for the system
3. Fixing system’s vulnerabilities (if applicable) to enhance security
4. Test application with some users and get feedbacks

Activity: Make process report

1. Put minutes of meetings during the project together
2. Describe clearly work division
3. Finish individual reflections
4. Finish team reflections

Estimated duration for this sprint is 2 weeks

Deliverables for **Sprint 3** are:

* The fully functioning application
* The application with checked and resolved issues
* Final revision of the process report

**M4** is for pre final demonstration of the application to the client and reviewing everything with the mentor.

## Sprint 4: Wrap Up

This phase only has one activity, deliver the product to the client, and collect feedbacks

Activity: Deliver the system to the client, and collect feedbacks

1. Hand in required deliverables to the client
2. Instruct client of the functionalities, and giving demonstration on the usage of the application
3. Collect feedbacks from the client
4. If client’s needs are not met, the team will use the remaining time to attend to the specified problems

Estimated duration is 2 weeks in total.

Deliverables for **Sprint 4** are:

* A working application

**M5** is when the final version of the product is sent to the client.