Basic requirements for food delivery app:

* Splash screen – Attracts users with an aesthetically pleasing registration and login form.
* Profile page – stores all the important information in one place: personal details, order history, etc
* Search bar – allows customers to select the desired items and specify all the necessary details about the order
* Payment – enables the option to pay for the order

Surveys:

One effective method for gathering stakeholder input is through the use of surveys. Surveys can be particularly valuable in gathering requirements from the app's final users, as they will be the ones interacting with the user interface (UI).

When designing the survey, it is important to carefully consider both the questions and the types of questions used. To gain a comprehensive understanding of the requirements, it is essential to ask the right questions. Additionally, the format of the questions may vary depending on the topic being addressed. For example, some questions may be open-ended, while others may require multiple choice or a rating scale response.

The number of survey questions were kept between 15-20, as it is the usual number for customer surveys according to pewresearch. Furthermore, for the closed-ended questions the options were kept between 3 to 6 options.

The survey questions were designed as a group, where each question is designed in order to give us insight into a certain aspect of behavior and experience of the final user. For instance, question 6 in the survey below is supposed to give us information regarding the design of apps since apps designed specifically for smartphones may differ from other mediums.

Survey questions:

1- Do you order food online?

Yes

No

2- If yes, from which company do you prefer?

UberEats

DoorDash

SkipTheDishes

Others

3- Are you satisfied with the app?

Yes

No

4- How often do you order food online?

Daily

Weekly

Monthly

5- Which meal do you typically order food online?

Breakfast

Lunch

Snacks

Dinner

6- In general, how do you prefer to order food?

mobile app

web browser

phone

7- What is the approximate money you spend on ordering food per time?

less than 50

less than 100

less than 150

more than 150

8- What feature do you wish to have in a food delivery app?

9- Why do you prefer online food delivery?

10- What do you consider to be the most important aspect when using a food delivery app?

11- What is the least pleasant aspect of your experience when ordering food online?

Example of some answers:

**Answer 1:**

1- Do you order food online?

**Choice:** Yes

2- If yes, from which company do you prefer?

**Choice:** UberEats

3- Are you satisfied with the app?

**Choice:** Yes

4- How often do you order food online?

**Choice:** Weekly

5- Which meal do you typically order food online?

**Choice:** Lunch

6- In general, how do you prefer to order food?

**Choice:** mobile app

7- What is the approximate money you spend on ordering food per time?

**Choice:** less than 50

8- What feature do you wish to have in a food delivery app?

**Answer:** Fast registration process for the first time.

9- Why do you prefer online food delivery?

**Answer:** I get to have access to a variety of the menus.

10- What do you consider to be the most important aspect when using a food delivery app?

**Answer:** Order timeliness is the most important aspect of the experience.

11- What is the least pleasant aspect of your experience when ordering food online?

**Answer:** It is unpleasant to have to reheat food when it gets to me.

**Answer 2:**

1- Do you order food online?

Yes

2- If yes, from which company do you prefer?

**Choice:** DoorDash

3- Are you satisfied with the app?

**Choice:** Yes

4- How often do you order food online?

**Choice:** Monthly

5- Which meal do you typically order food online?

**Choice:** Dinner

6- In general, how do you prefer to order food?

**Choice:** mobile app

7- What is the approximate money you spend on ordering food per time?

**Choice:** less than 100

8- What feature do you wish to have in a food delivery app?

**Answer:** GPS tracking of the order from the store.

9- Why do you prefer online food delivery?

**Answer:** I do not have time to prepare food at home.

10- What do you consider to be the most important aspect when using a food delivery app?

**Answer:** User reviews of the restaurants and their services.

11- What is the least pleasant aspect of your experience when ordering food online?

**Answer:** Issues with the payment methods and failure to place the order.

Survey results:

After analyzing the answers to the survey, we see that:

* Most people use food delivery on their smartphones, which indicates that we should take the mobile-first approach on our design and implementation.
* Many users prefer food delivery for the variety they can access when using the app.
* Many users prefer food delivery because they do not have time to prepare food at home.\*
* Many users consider the timeliness of the order and user reviews the most important aspect of the experience.\*
* Many users complain about having to reheat their food upon delivery.\*
* Many users dislike having issues regarding the payment system.
* Many users would like a fast registration process.
* Many users would like to track their order.

It is clear from the results that users place a high value on the speed and efficiency of food delivery apps. This is indicated by the fact that many of the results that were highlighted with an asterisk (\*) are related to time. This can include things like accurate estimated delivery times, real-time tracking of food delivery, and the ability to schedule future deliveries.

Based on the survey results, the following requirements were identified:

* The app algorithm must result in the order reaching the consumer in the shortest amount of time.
* The app must be designed around smartphones, also called mobile-first approach.
* The app must offer menus maintained and updated all the time.
* The app must offer order tracking to the end users.
* The app must allow fast registration, for instance through the usage of other platforms such as Google or facebook.
* The app must implement different seamless payment systems to avoid any issues with the payments.

Upon researching and designing the survey, we became aware of the following advantages and disadvantages of this method.

Advantages:

* Surveys are a reliable and easy to understand method of gathering data. They are designed to be straightforward, with clear and concise questions.
* Surveys generate data that is easy to analyze. The responses can be quantified and grouped in various ways, making it simple to identify patterns and trends in the data. Surveys can be offered to a large population, which allows for a wide range of perspectives and input to be gathered. This is especially useful when studying a diverse population.
* Surveys are relatively cheap to conduct, as they can be administered online, via email, or by mail, which eliminates the need for expensive data collection equipment or staff.

Disadvantages:

* Surveys may include biased questions, which can skew the results and lead to inaccurate conclusions. This can happen due to the wording of the question.
* The order of the questions in a survey can influence the responses, as participants may be more likely to answer one way or another depending on the questions they have been asked previously.
* Surveys may include wrong questions that are not well-designed or not related to the research topic, which may lead to inaccurate or irrelevant data being collected.

**Document Analysis**

In this part document analysis technique was used to gather information and identify requirements for the new food delivery app. Three resources from the internet were chosen for our analysis as they give a broad range of information on what users liked and disliked in food delivery apps.

The documents :

* [modern life: food](https://medium.com/building-h/a-survey-of-modern-life-food-12e03503703f#:~:text=Over%2090%25%20of%20users%20of,their%20own%20meal%20(47.9%25).)
* [Survey of 28 food deliverers](https://www.deseret.com/2019/8/3/20755910/survey-28-of-food-app-deliverers-said-they-ve-stolen-your-food)
* [Survey Food delivery consumer](https://www.foxbusiness.com/lifestyle/food-delivery-apps-consumer-frustration-survey)

The most relevant statistics from the documents were as follows :

* 21.2% of dishes were missing or incorrect
* 17% of customers complained about the food temperatures
* 16% of customers reported that their orders were received late
* 63% of customers prefer to tip through the app
* 37% of customers tip with cash
* 59% of customers prefer to decide on the tip we ordering
* 53% of customers tip differently based on the weather
* 11% of customers reported that prices are inconsistent

Based on these statistics, the following requirements were established:

* The food delivered need to be the exact food ordered (accuracy)
* The food delivered need to be kept at the right temperature when delivered to customers
* The app must have consistent prices
* The app must have a flexible tipping system
* The app must allow cash as a tipping option

Advantages of Document analysis :

* It provides a comprehensive examination of a broad range of data from a multitude of resources.
* Using this technique let us identify key informations that can be used to create requirements for our app
* Document analysis is efficient for gathering data since it does not require resources like surveys and questionnaires

Disadvantages of document analysis:

* The data gathered are limited to the scope of the document that are used
* The data gathered can be biased to the resources
* The data may be outdated and limited.