

Design thinking for chatbots



Design thinking

Design thinking is an approach to developing products, services, or processes that focuses on users' needs and perspectives.



- **evidence**
- **users' needs**

- **technological challenges**
- **social issues**
- **global problems**



Empathize



Define



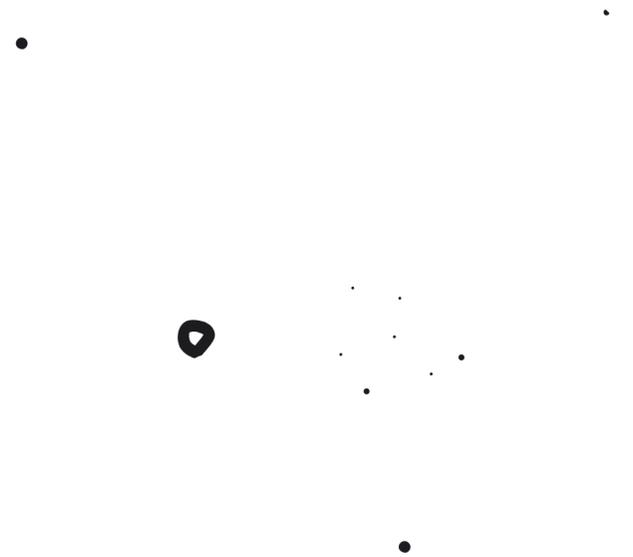
Ideate



Prototype



Test

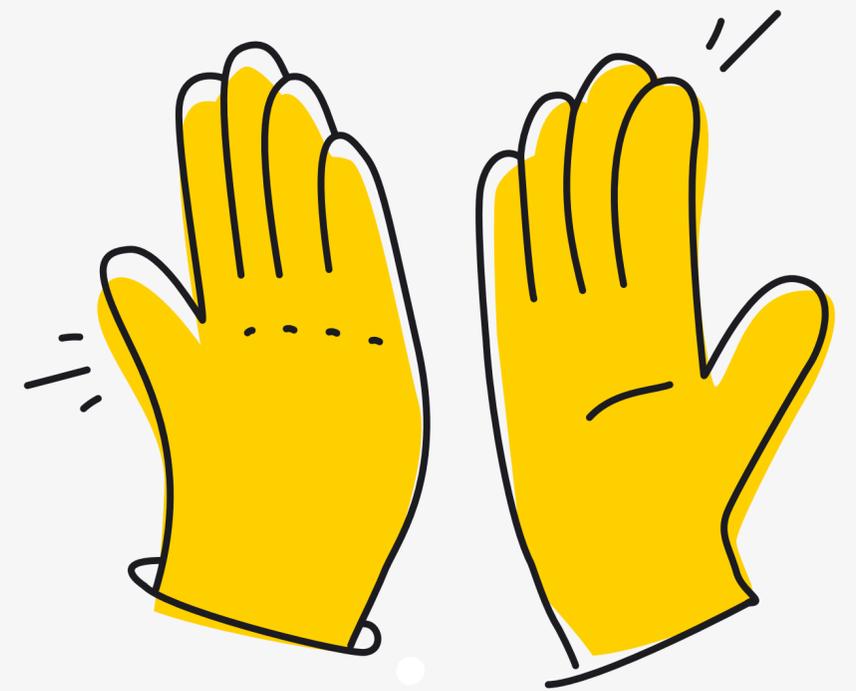




2019

Empathize

During this phase, you need to find out who your users are. You define what problems they face, what causes them, and what users want to achieve.



User Journey Map

Phase of journey	Pre-departure	Flight	Arrival	Transfer to the hotel	Traveling around the visited country	Going back to the airport	Pre-departure
Actions What does the customer do?	Arriving at the airport 2 hours before the flight Finding the gate Checking luggage	reading a book watching a movie	collecting the luggage	Finding the bus catching the taxi	Using public transport Going for optional excursions	Catching the bus to the airport	Arriving at the airport 2 hours before the flight Finding the gate Checking luggage
Problems & barriers What problems might the customer have?	Don't know English Forgot some documents		can't find their luggage have a problem with communicating	don't know where to find a bus missed a bus	lost the paper with the information can't find the location	don't know when the bus arrives	don't know English forgot some documents
Customer feelings What is the customer thinking and feeling?	nervous they might be late afraid they will get lost excited	happy they're finally in a plane	stressed relieved	lost nervous tired excited	nervous excited	nervous	nervous they might be late afraid they will get lost tired
Improvement How can you solve the customer's problem with a chatbot?	List all the necessary documents the customer needs to have Let the customer know who they should contact when the problem occurs Provide guidance on how to move around the airport	Provide PDF resources they can download to read while flying	Provide information on what the customer needs to do when their luggage is missing Give tips on what to do after landing	Provide the map of an airport Give tips on how to find a bus or taxi Share links to timetables of local public transport	Share tips on how to use public transport Provide information on where the customers can catch the bus, show pictures	Provide information when and where the bus arrives	List all the necessary documents the customer needs to have Let the customer know who they should contact when the problem appears Provide guidance how to move around the airport

Analogies

“Finding something on the phone on the go is like searching for a needle in a haystack.”



- ➔ Get feedback from your support team
- ➔ Analyze requests from all your channels
- ➔ Talk with extreme customers



Define

At the define stage you unpack findings about users and turn them into the users' actual needs.



A problem **statement**

A **problem statement** is the description of an issue you want to solve. It also presents a goal or a state you want to achieve by solving it.

5 Ws and H Framework

What

problems does the user want to solve?

She wants to quickly find information regarding her travel while abroad.

5 Ws and H Framework

Who

is the person experiencing the problem?

Anna, a stressed traveler.

5 Ws and H Framework

Where

is the user while they want to solve the problem?

She's abroad while traveling, using her mobile phone.

5 Ws and H Framework

When

does the problem occur?

Anna gets frustrated when she can't quickly find specific information regarding her trip and flight by using her phone.

5 Ws and H Framework

Why

solving the problem is essential?

Anna gets nervous because she's in a hurry, and she finds it difficult to search for information on her own or reach out to customer support while being on a go.

5 Ws and H Framework

How

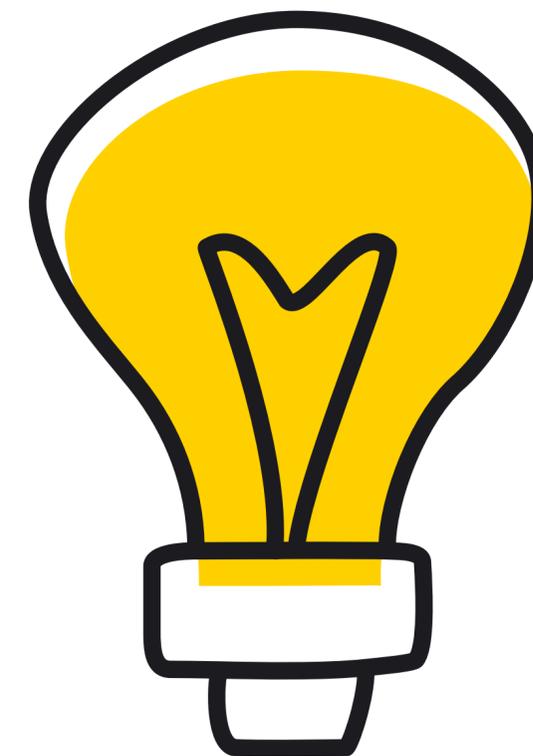
does the user reach the goal?

Anna would love to use the phone to find important information easily and when she needs it.

(Who) Anna **(user characteristics)** is a tourist **(user need)** who needs to quickly find specific information regarding her trip on her phone **(insight)** because she is in a hurry and she's stressed that she might have got lost abroad.

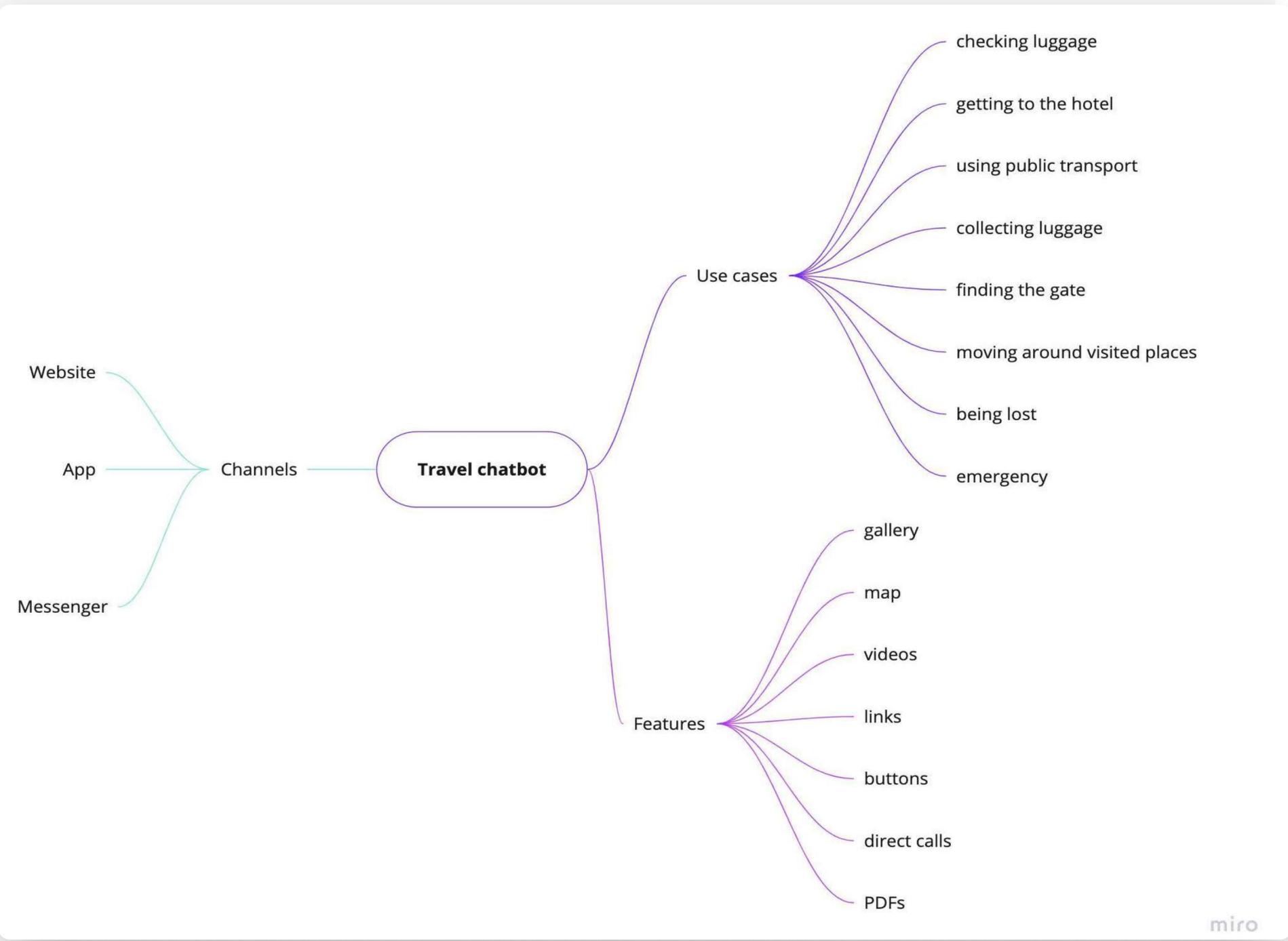
Ideate

At this stage you generate all possible ideas where your chatbot solves the user's problem.



- provide information via website or app
- share links and infographics
- suggest types and formats of responses your chatbot might send like text, buttons, videos

Mind map



Worst

possible idea

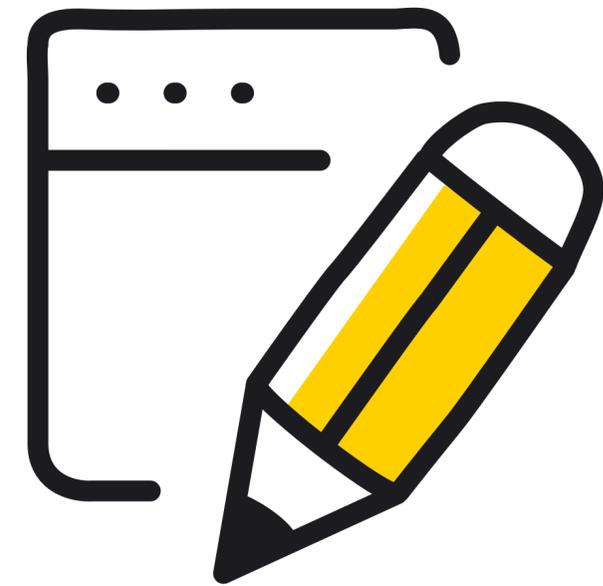
The worst possible idea can relax team members and improve their creativity.



- Which ideas are technically possible?
- Which ideas solve the problem and provide the best user experience?
- Which ideas can you afford and which are too expensive?

Prototype

During this stage you prototype your chatbot Story draft which is a conversation scenario.





Travel Companion



Online



Hello 🖐️ I'm Travel Companion Bot 🚗

How can I help you today?

Reservations

Cancelations

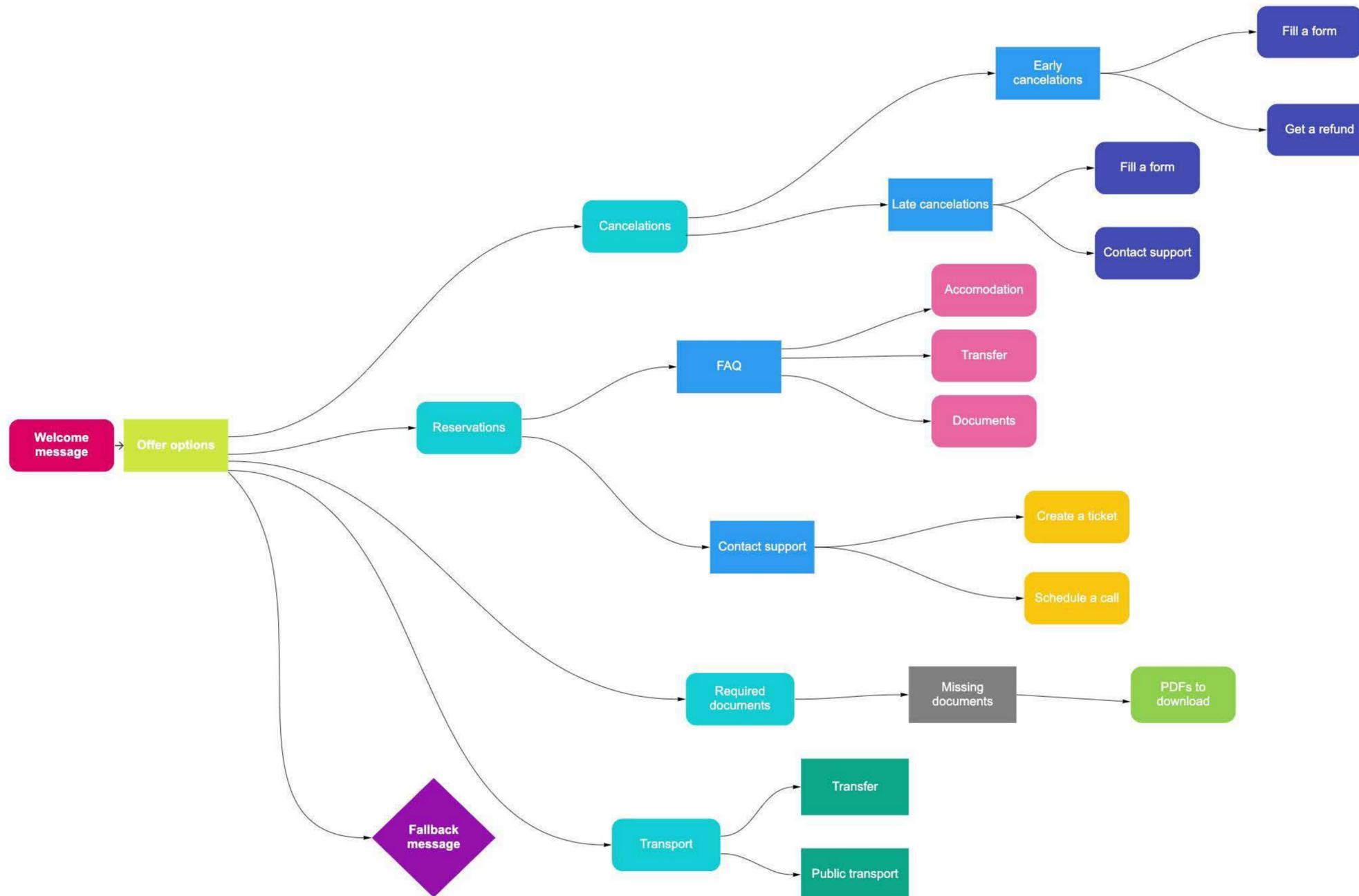
Departures

Required documents

Type your message here



Powered by [ChatBot](#)



Plant Shop Bot

⚡ 🔍 ⚙️ 🕒
Test your bot
▶ Publish

```

graph LR
    Start[Welcome message] --> BR1[Bot response]
    BR1 --> BP1[Buy plants]
    BR1 --> BA[Buy accessories]
    BR1 --> JB[Just browsing]
    BR1 --> BP2[Buy plants]
    BP1 --> BR2_1[Bot response]
    BR2_1 --> BR2_2[Bot response]
    BA --> BR3_1[Bot response]
    BR3_1 --> BR3_2[Bot response]
    JB --> BR4_1[Bot response]
    BP2 --> BR5_1[Bot response]
    BR5_1 --> BR5_2[Bot response]
  
```

Bot
Online
⋮ ✕

I'm just browsing

Contact us

You

=< Need accessories

Bot

In the middle of repotting?

Pots

Send a message...

🏠 🔄 100% 🔄
2nd time Welcome message
Buy accessories

Test

The testing phase lets you verify whether your chatbot works as intended and can solve the user's problem.



In this lesson you **learned**

Design thinking is an approach to developing products, services, or strategies that focuses on users and their needs. It can help you come up with a chatbot idea

In this lesson you **learned**

Design thinking is made of 5 stages:

- **Empathize** — where you learn about the users and their needs.
- **Define** — where you specify the actual problem you want to solve.
- **Ideate** — this stage allows you to generate ideas for your chatbot.
- **Prototype** — this is when you build a functioning prototype.
- **Test** — this allows you to test your prototype and check with your target audience whether it addresses their needs.