

STEP 1: EMPATHY MAP

ABOUT THE PERSONA

Cabin Crew -
Responsible for
passenger service and
inflight operations

Busy On
The Go

Team-
Oriented

Time
Sensitive

Not
Highly
Technical

Always on
their feet

Customer-
Focused

Must appear
approachable

Have limited
access and space
for tools

THINKS AND FEELS

"I don't want to
feel unprepared
during service"

"I hope I don't
accidentally
tell anyone the
wrong
information"

"I need a reliable
way to know
which meals are
left so I can focus
on serving
passengers"

Watching
for the
seatbelt
sign

"Trying to juggle
memorising meal stock
levels alongside my other
duties is overwhelming."

"I'm not a
cook, nor a
meal
expert"

Passengers
needing
assistance

Other airlines
in the industry
adopting more
digital tools on
board

Discrepancies
between
inventory
counts and
actual stock

Impatient
Customers

The
development
of WiFi on
board

Colleagues
rushing
about

Crowded
Aisles

Disorganised
meal storage

limited
workspace and
room on flights.

Trouble
storing and
finding paper
tracking sheets

HEARS

Passengers:
"Do you have
vegetarian
options
available?"

Feedback
on service
speed /
quality

Complaints
on
unavailable
meal options

Passengers:
"Am I allowed
a second
meal?"

Colleagues: "Do
we still have
more chicken?"

Alerts on dietary
requirements or
allergies

Noisy Surroundings:
conversations amongst
passengers / announcements
/ service bells / crying babies

Ensure the app doesn't
overwhelm staff with
unnecessary alerts.

Shares updates on
meal availability with
other crew members.

Collects
empty trays
and disposes
of waste.

Pushes the
meal cart
down the
aisle

Distributes
meals to
passengers

Moves quickly and
efficiently to serve
everyone whilst food is
hot.

General good body
language: engages with
passengers,
consistently smiling

"Here's your
meal Sir, just as
requested"

"Let me check
if we have
more if that
meal for you"

Asks
Colleagues

Ensures everyone
is following safety
procedures.

SAYS AND DOES

An easy-to-use app
that updates inventory
for all crew onboard in
realtime.

Automated
alerts for
low-stock
items

An
understanding
of meal stock
levels at
a glance

Simple
UI

Happier
passengers due
to better meal
communication

Better collaboration
between crew
members

Data Insights to
better plan for
future flights.

GAINS

PAINS

Difficulty
keeping an
accurate
record of
inventory

Difficulty maintaining a high
quality of service, catering
towards every passenger's
food demands.

Lack of real-time
synchronisation
/ understanding
amongst
colleagues on
stock levels.

Limited time
to recount
stock of each
meal type
regularly.

Lack of
Confidence
in stock
levels

Tight
cabin
spaces

STEP 2: SYNTHESISE FINDINGS INTO APP REQUIREMENTS

FUNCTIONAL REQUIREMENTS

HIGH

The app must have the ability to add and delete meal inventory

HIGH

The app displays current meal counts.

MEDIUM

The app must highlight low stock levels.

HIGH

The app must allow users to undo changes

MEDIUM

The app should give users the chance to report issues / leave feedback

LOW

The app should have charts (e.g. pie chart) to visualise stock levels

HIGH

The app should allow the user to gain insights into inventory quickly / at a glance

HIGH

The app must have the ability for users to enter their flight, so that the correct meals are shown.

MEDIUM

The app should support multiple language to cater for cabin crew worldwide.

LOW

The app should allow users to enter a passengers first choice meal, in order to track demand.

NON-FUNCTIONAL REQUIREMENTS

HIGH

The app must update inventory data for all crew on board instantly after a user input

MEDIUM

The app must be able to handle up to 15 concurrent users

HIGH

The app should be fit for iPhones.

LOW

The app must be accessible (adhere to WCAG 2.1 guidelines).

HIGH

Only authorised users should have access to the app.

HIGH

The app must be able to handle increased user activity during peak meal service times.

MEDIUM

The app interface should require no more than 20 minutes training for new users.

HIGH

The app must have navigation between key functions (e.g. viewing inventory / updating stock)

HIGH

The app must run offline, due to unreliable WIFI in the sky.

LOW

The app should allow for user updates to only need a few seconds of the user's time.

REQUIREMENT PRIORITY

HIGH

A basic feature required for the app. Without this, the app doesn't serve its initial purpose.

MEDIUM

A feature the app should have to enhance its usability, security and more. - These are the best practices we should apply when developing.

LOW

A 'nice to have' requirement of the app, which'll bring further insights and benefits to the company.

POV:

Cabin Crew need a **streamlined** inflight meal inventory tracking process to **reduce errors** and **improve customer service**.

STEP 3: FORM A NOW, NEXT & LATER FOR SPRINT PLANING

NOW



Create an app for iPhones (cabin crew work phones) which is accessible offline

The app must show current inventory stock levels for meals on board, with the ability to add and delete stock

The app must have a log in page to keep its data secure.

The app must allow crew to change which flight they're looking at.

The app must have buttons to navigate it.

The app must be scalable to be used concurrently on board, and at peak meal times.

Minimal Viable Product (MVP):

A basic, inventory tracking app that allows authorised users to view and edit real-time meal stock levels on a flight of their choice.

NEXT



Implement visualisations / use of colour to make the app more user-friendly, and easier to gain insights quickly.

Add the chance for users to give feedback, or report any issues they're facing.

Increase the apps inclusivity by catering for multiple languages - Add a 'Select Language' field to the login page

Plan a short training session to present the app to stakeholders.

Future Iterations (Sprints):

Adding more usability and interactive elements to the app, as well as the wider goal of using it to populate datasets and hence analyse and forecast demand.

LATER



Generate the ability to log customers first choice meals vs their actual meal (this'll allow the company to understand and forecast demand, making better choices about which meals to stock, minimising waste)

Add more visualisations to the app to give it more of a dashboard view, which can then be viewed and analysed by catering teams.

Further enhance inclusivity by making the app accessible to the few crew members who may be visually impaired (e.g., colour blind friendly colour scheme).