

# Quality Control MobileApp

UX/UI Design

**PROTOTYPING** 

**RESEARCH** 

UX/UI

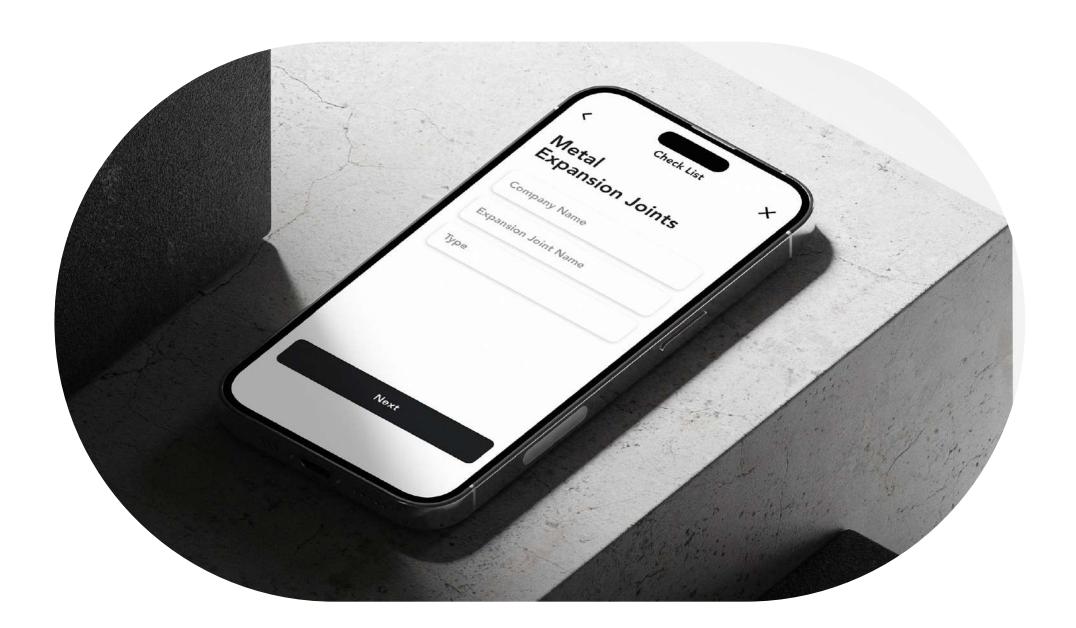






Said Yigit Camlica 2023





A New Feature for Quality Control Processes: Quick Check, Organise and Track Process

We aim to provide a modern solution in line with the latest technological trends by moving traditional quality control systems from applications made through physical documents and documents to the mobile platform. Our mobile application is developed using a customised approach to meet the user's preferences.



#### Company

BundleTec Ltd

U.S.A - TURKEY

#### Role

- Project Manager
- Interaction (IxD) Designer
- User Experience (UX) Designer
- User Interface (UI) Designer

#### **Interaction Design**

High-fidelity interactive prototype for key tasks

#### **UX/UI Design:**

- Competitive analysis
- User surveys and one-on-one interviews
- User personas
- Task flows
- Journey maps
- Site maps
- Low fidelity wireframes and prototype
- High fidelity prototype
- Usability tests and findings

#### **Development**

- Front-end Develop
- Back-end Develop

#### **The Opportunity**

BundleTec is a company engaged in Expansion Joint production. The company's current quality control process is based on physical documents. This process is timeconsuming, error-prone and inefficient.

As a UX/UI designer, I saw an opportunity to solve these problems by digitalising BundleTec's quality control process. The application I developed makes it possible to track the entire quality control process via a mobile application.

- Eliminating physical documentation makes the process faster, more efficient and more accurate.
- Improved process management: The app allows tracking the entire quality control process on a single platform. This improves workflow and reduces the risk of errors.
- Transparency of quality control: QR codes make it easier to share quality control information with customers. This increases customer satisfaction.

This project could improve BundleTec's quality control process, increasing the company's competitiveness.









## **Proposed Features**

- Quality checklist: The application includes a quality checklist with all the necessary checks to complete the quality control process. The list can be tailored to the specific needs of the company.
- QR codes: A QR code is attached to each product. The QR code contains the quality control information of the product. This information can be scanned and accessed by the purchasing company's production manager and purchasing manager.
- Notifications: When the QR code is read, the application is notified that the quality check is complete and the product can be shipped to the customer.



These features will improve BundleTec's quality control process in the following ways:

- Eliminating physical documentation makes the process faster, more efficient and more accurate.
- Improved process management: The application allows tracking the entire quality control process on a single platform. This improves workflow and reduces the risk of errors.
- Transparency of quality control: QR codes make it easier to share quality control information with customers. This increases customer satisfaction.

The potential benefits of the application include the following:

- Increased production efficiency and quality
- Improving workflow
- Reducing errors
- Increased customer satisfaction
- Increased competitiveness

These features can potentially improve BundleTec's quality control process, increasing the company's competitiveness.

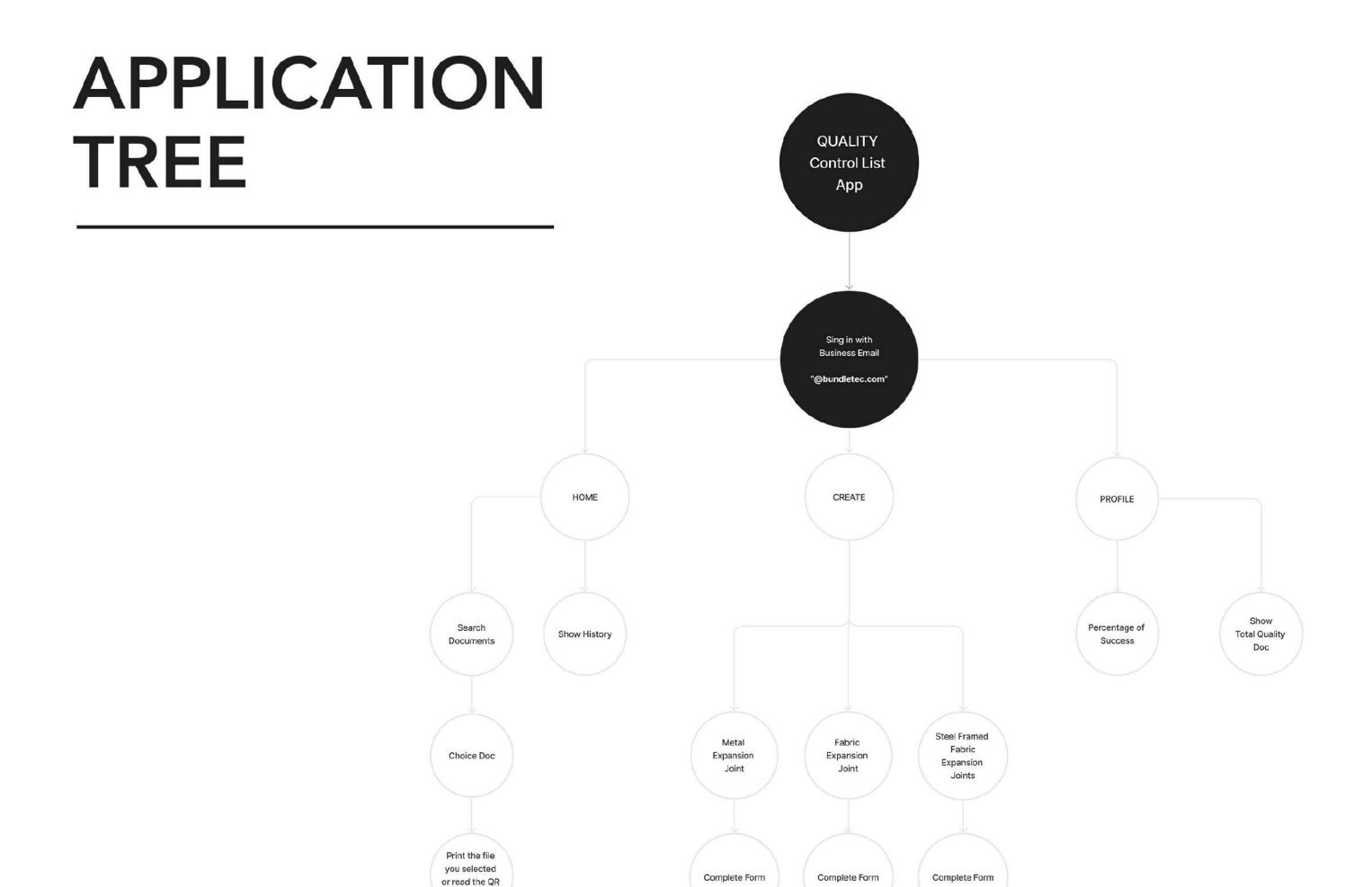












QR Code

Generator &

Send Email

QR Code

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QR Code

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## Design Approach

The design approach was based on the following principles:

- User-centred design: The app was designed to meet the needs and expectations of BundleTec employees and purchasers.
- Digital experience design: The app was designed to be easy and intuitive for mobile devices.
- Productivity: The application aims to make BundleTec's quality control process faster, more efficient, and error-free.

The design process involved the following steps:

- **Research:** At the beginning of the project, interviews were conducted with BundleTec employees and the purchasing companies. These interviews were used to identify the project's goals and user needs.
- **Prototyping:** The first prototype of the application was created based on the information obtained from the research. This prototype was tested with users, and feedback was received.
- Development: Based on the feedback, the application was developed and tested.
- **Deployment:** The application was distributed to BundleTec employees and purchasers.

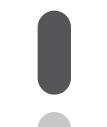
The design approach included the following elements:

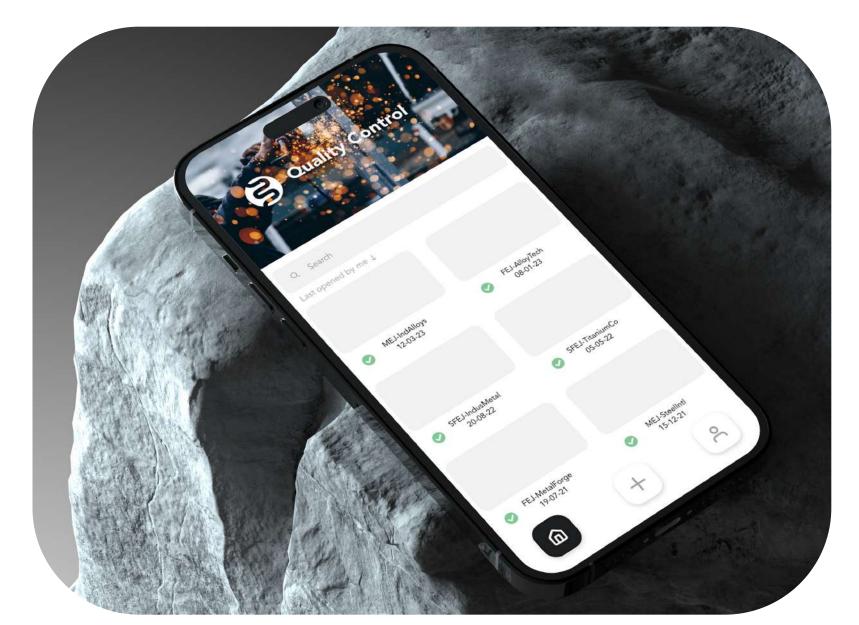
- User-friendly interface: The app's interface was designed to be easy for users to understand and use.
- Intuitive controls: The app's controls were designed to reflect users' natural gestures.
- Visual cues: The app uses visual cues to help users find their way around.
- Mobile compatibility: The app was designed to work seamlessly on mobile devices.

This design approach has made the BundleTec Quality Control Checklist App user-friendly and efficient.











## Research Objectives

- Understand the current quality control process
- Identify the needs and expectations of users
- Identify best practices for mobile quality control apps
- Research Methods

The following research methods will be used to achieve the research objectives:

- Literature review
- Interviews with quality control managers
- Surveys with quality control managers and client companies
- Literature Review

#### **Interviews**

In-depth interviews will be conducted with quality control inspectors to understand their needs and expectations for the mobile app.

#### Surveys

Surveys will be distributed to quality control inspectors and client companies to gather quantitative data on user needs and expectations.

#### **Data Analysis**

The data collected from the research will be analyzed to identify trends and patterns. This information will be used to inform the design of the mobile ap

#### CONCLUSION

The research for this project will provide the necessary information to design a mobile app that will improve the quality control process at BundleTec.

#### **Changes to the Existing Research Plan**

The following changes have been made to the existing research plan:

- The focus of the research has been narrowed to the **specific needs of BundleTec.** The original research plan was too broad and did not focus on the specific needs of the company.
- The research methods have been adjusted to be more efficient and effective. The original research plan included a number of research methods that were not necessary or feasible.
- The timeline for the research has been adjusted to be more realistic. The original research plan was too ambitious and would not have been able to be completed in a reasonable amount of time.







## Deepening User Empathy

#### Persona 1

Name: Ayşe

**Age:** 30

**Title:** Quality Control Officer **Settlement:** Istanbul, Turkey

Ayşe works as a quality control officer at BundleTec. She is 30 years old and lives in Istanbul. She is a newcomer trying to understand the quality control process fully.

#### **Ayşe needs:**

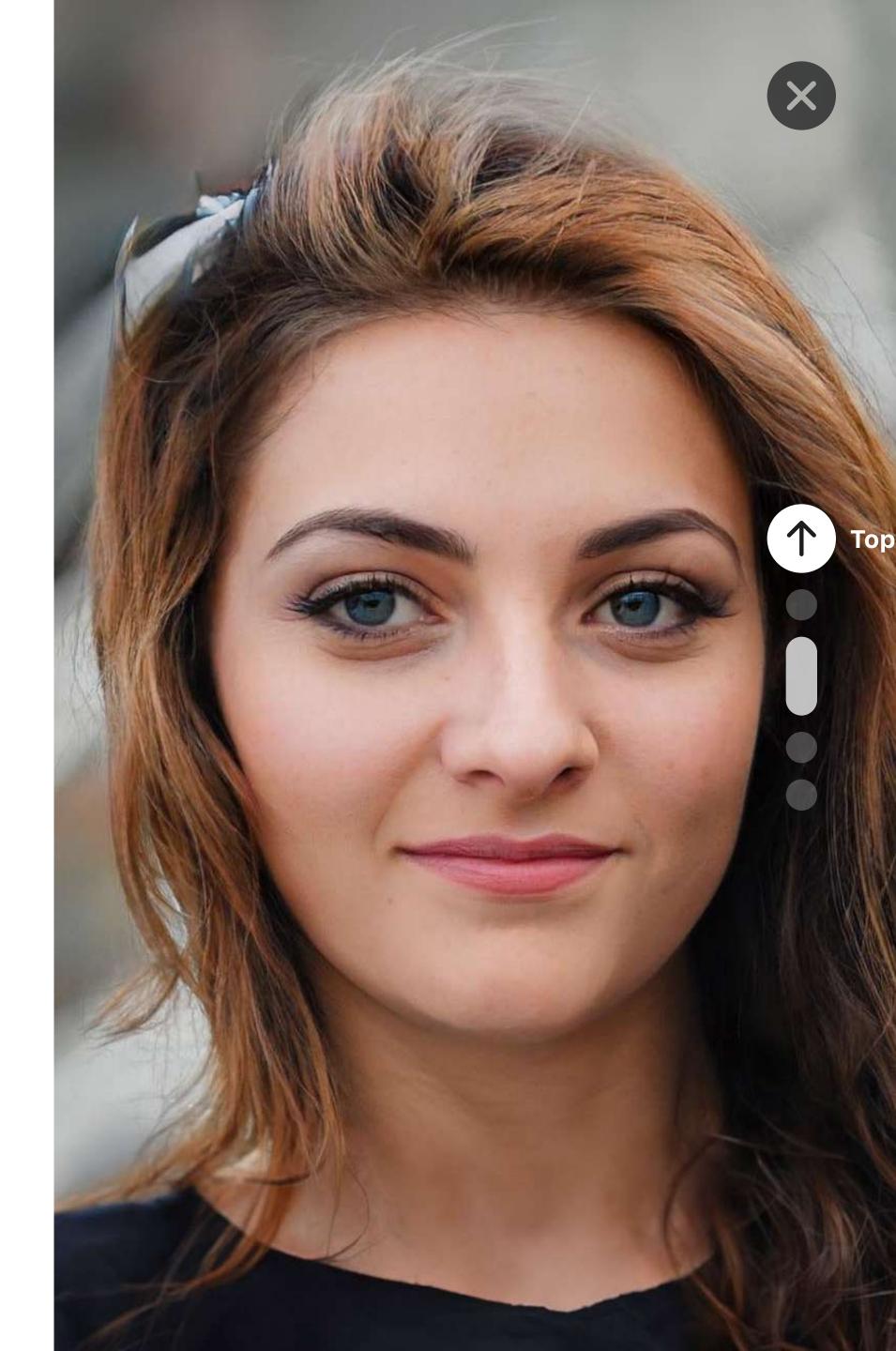
\*\*A simple and understandable interface

\*\*Easy organization of checklists

Easy reporting of quality control results

#### **Details:**

- Ayşe has just graduated from university and is not yet experienced in quality control.
- She is willing and eager to learn the quality control process.
- She wants the app to be easy to use and understand.
- Ayşe wants to organize the checklists easily according to her needs.
- Ayşe wants quality control results to be quickly reported.



#### Persona 2

Name: Mehmet

**Age:** 45

Title: Quality Control Supervisor

Settlement: Ankara, Turkey

Mehmet works as a quality control supervisor at BundleTec. He is 45 years old and lives in Ankara. He knows the quality control process well and wants to improve efficiency.

#### Mehmet's needs are:

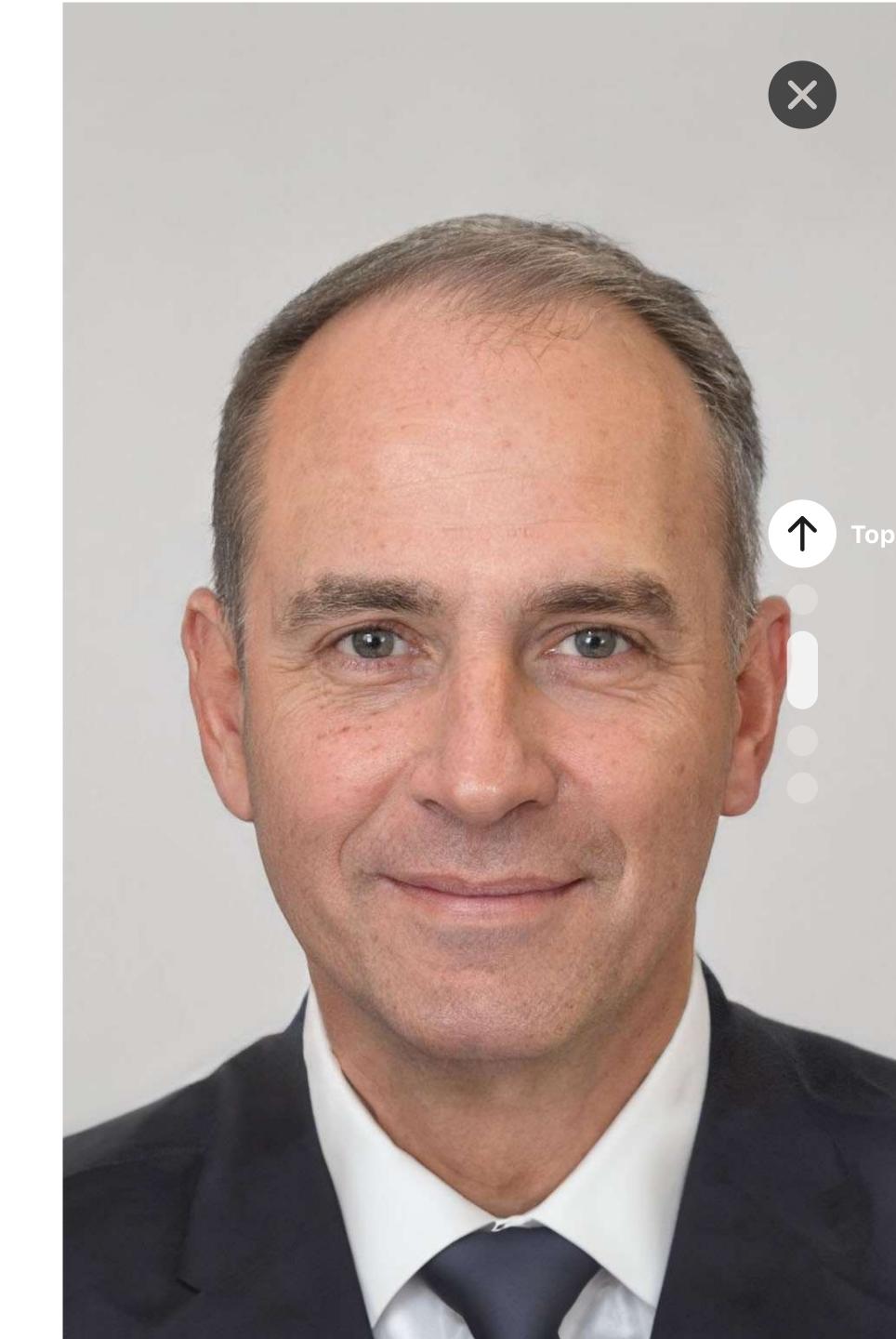
\*\* Speed up the quality control process

\*\*Reducing control errors

Better manage quality control data

#### **Details:**

- Mehmet is an experienced and specialized person in the field of quality control.
- Mehmet is looking for new ways to improve the efficiency and effectiveness of the quality control process.
- Mehmet wants to develop new methods to reduce inspection errors.
- Mehmet wants advanced tools to manage and analyze quality control data better.



#### Persona 3

Name: Fatma

**Age:** 55

**Title:** Purchasing Manager **Settlement:** Izmir, Turkey

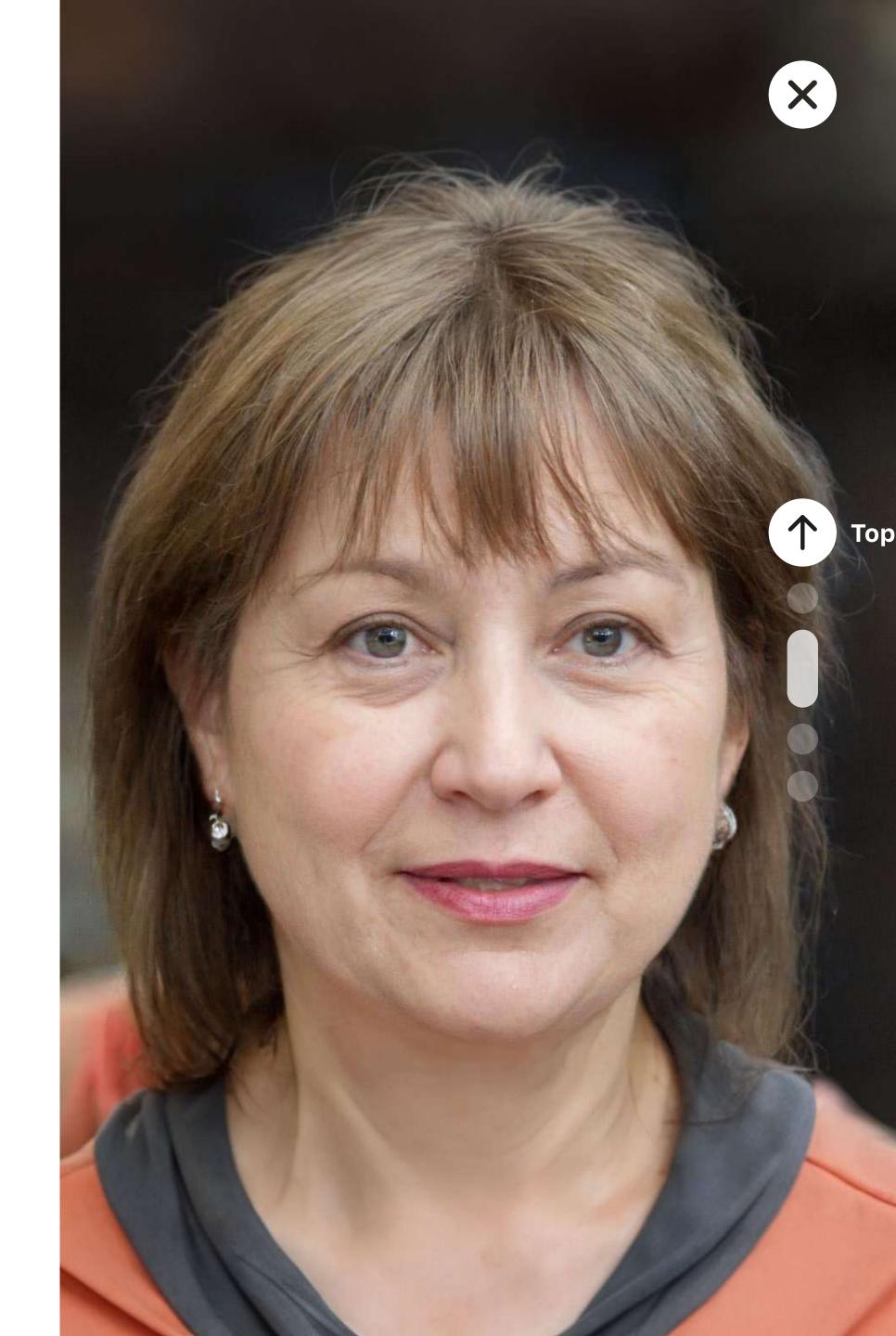
Fatma works as a purchasing manager at X Makine. She is 55 years old and lives in Izmir. She buys expansion joints from BundleTec and wants the quality control process to be transparent.

#### Fatma's needs are:

- \*\*Fast and easy access to quality control information
- \*\*To manage the quality control process in a reliable manner Ease of reporting quality control data

#### **Description:**

- Fatma is an experienced and specialized person in purchasing.
- Fatma wants to be sure of the quality of the products she buys.
- Fatma wants the quality control process to be transparent and traceable.
- Fatma wants quick and easy access to quality control data.



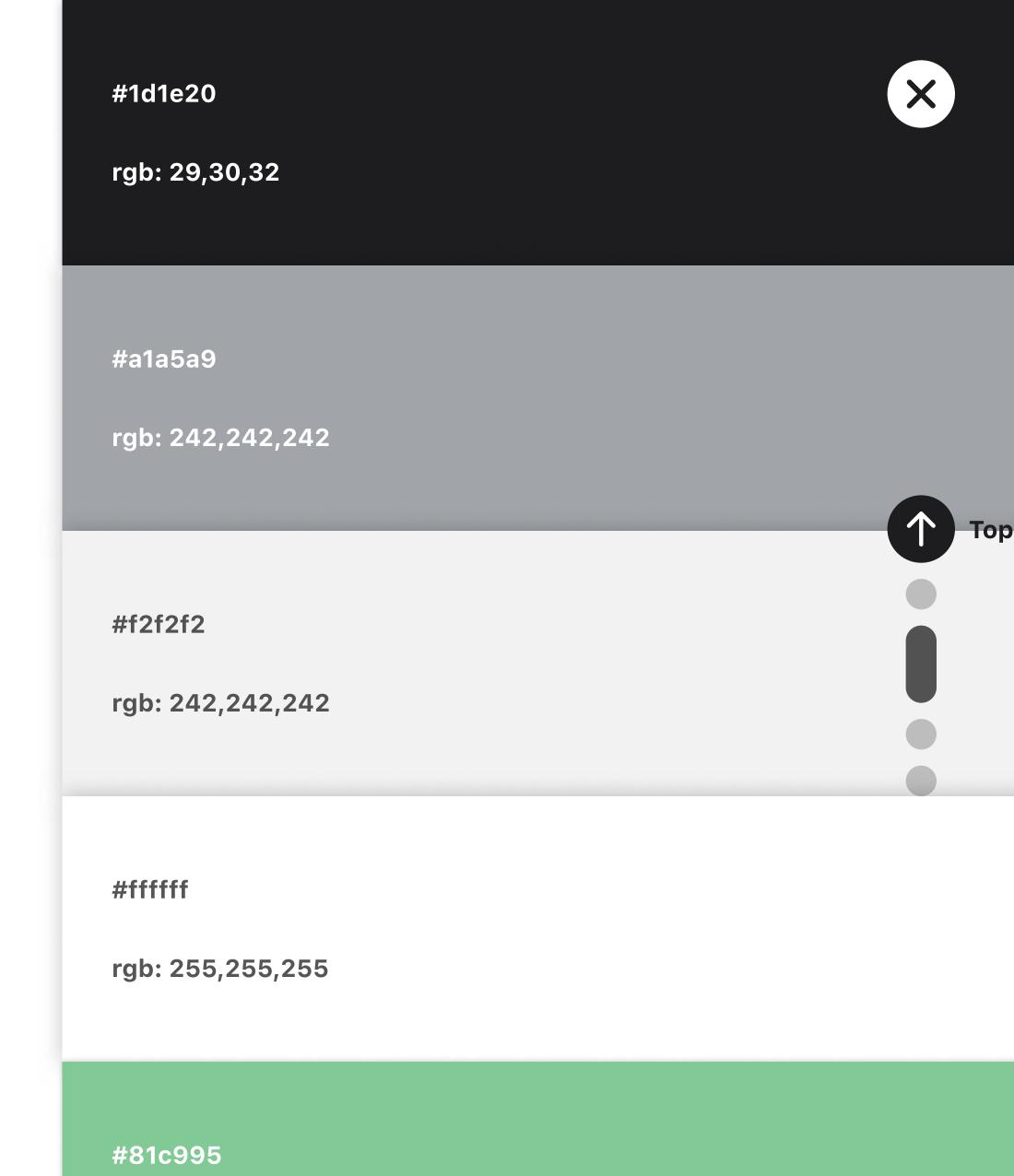
# StyleGuide

## **AvenirNext**

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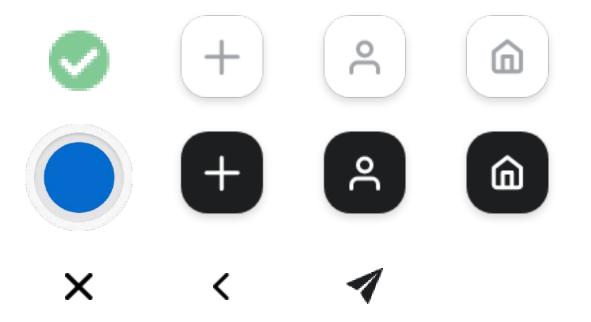
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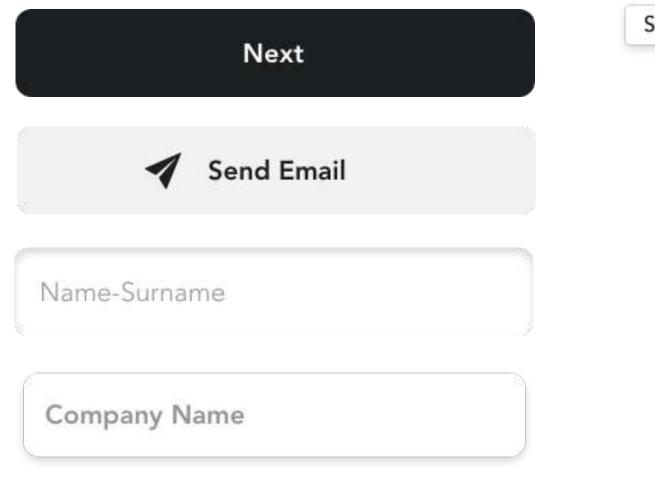
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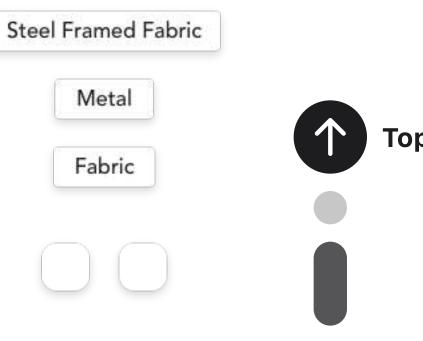


## Icon Set

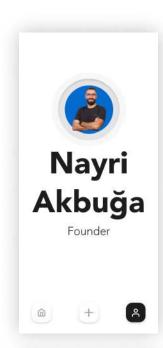


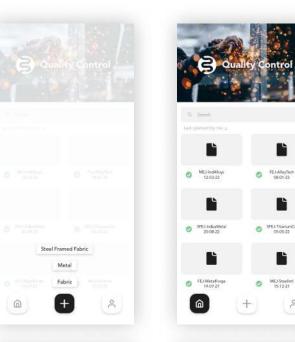
## **Button Set**



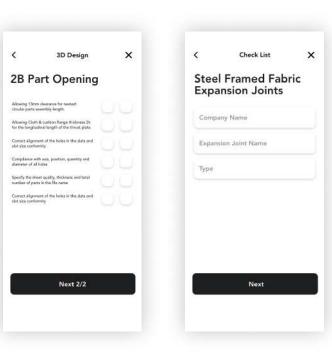


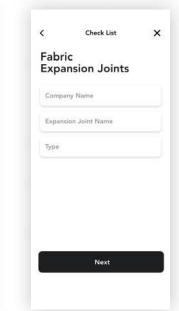


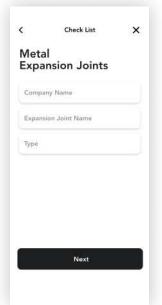












**Check List Created** 

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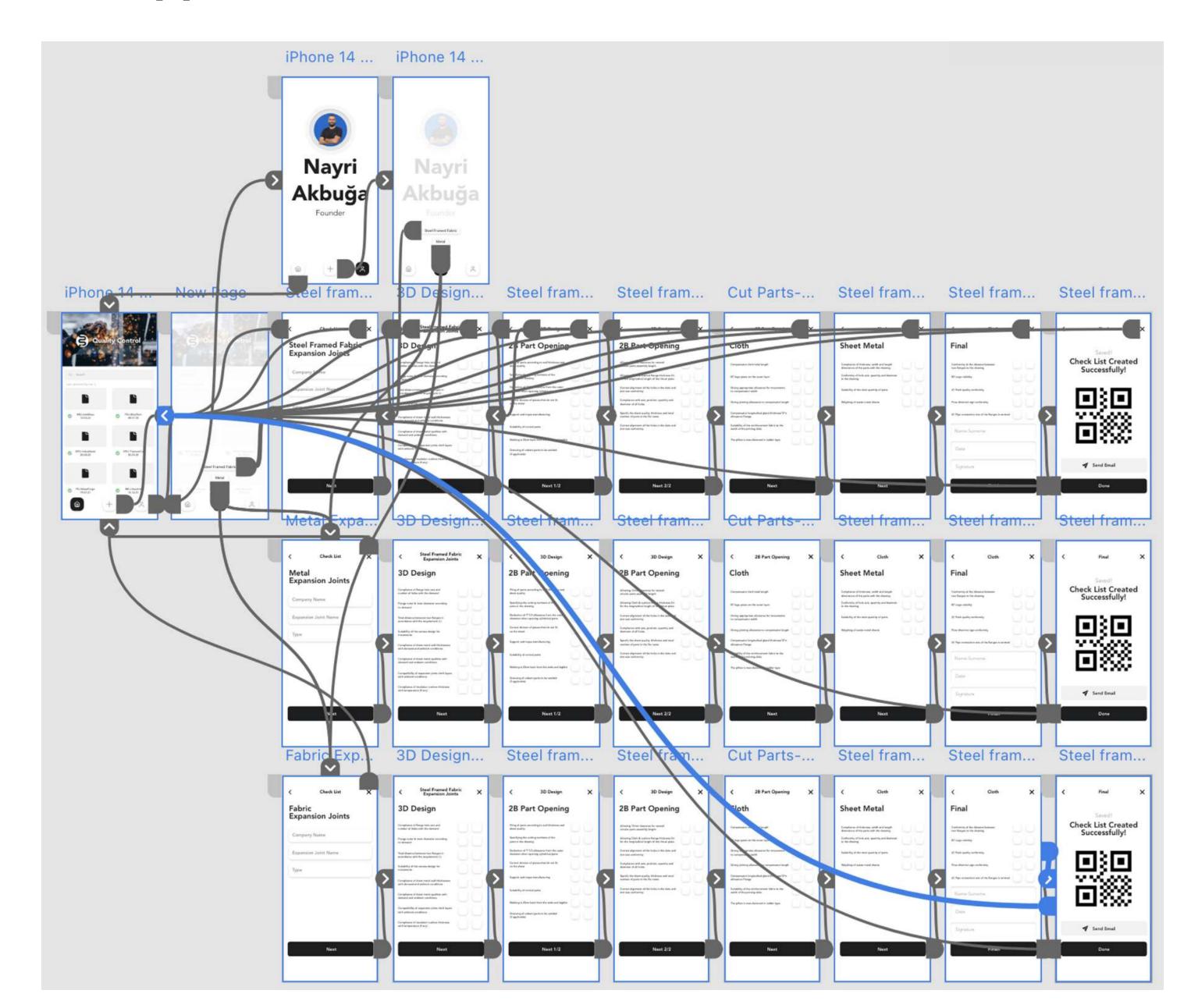






















## Lessons Learned

During the app development process, the following lessons were learned:

#### The importance of user-centered design

The app was designed using user-centered design principles. This means that the app meets user needs and expectations.

User-centered design has brought benefits such as the following:

- The app has become more accessible and more straightforward to use.
- The app's functionality was better received.
- User satisfaction with the app increased.

#### Significance of the research

The app development process started with extensive research. This research was used to identify user needs and expectations for the app.

The research provided benefits such as:

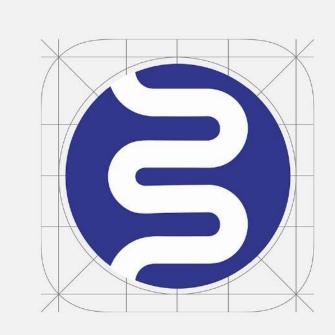
- It was ensured that the app was focused on the right goals.
- It was ensured that the app included the needed functionalities.
- It was ensured that the app was designed to satisfy users.

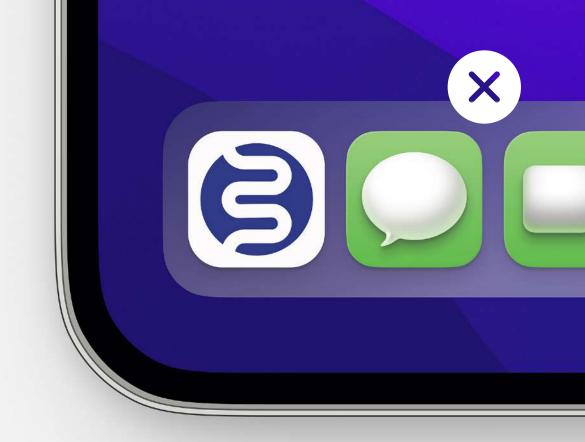
#### The importance of collecting feedback

Throughout the app development process, feedback was collected from users. This feedback was used to improve the app.

Collecting feedback provided benefits such as:

- It helped to identify bugs and shortcomings of the app.
- It has helped to improve the functionality and usability of the app.
- It helped to increase user satisfaction with the app.





These lessons are important lessons for future mobile app development projects. Following these lessons, developers can build more successful mobile apps that meet user needs and expectations.

#### **SPECIAL LESSONS LEARNED**

The following specific Lessons Learned were achieved for the BundleTec Quality Control Checklist App:

- The editability of checklists was a critical need. Users wanted to organize the lists according to their needs.
- Reporting quality control results was a critical need. Users wanted to write quality control results quickly.
- Managing quality control data was a critical need. Users wanted to collect and analyze quality control data quickly.

These Lessons Learned will be considered in future versions of the application.











# THANK YOU!

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## **Other Projects**

EJ Calculation App



Luna MicroCare e-commerce





