

PROFESSIONAL TRAINING REPORT
at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award of Bachelor of
Engineering Degree in Computer Science and Engineering

By

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MARCH 2022



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

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(Established under Section 3 of UGC Act, 1956)

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DEPARTEMENT OF COMPUTER SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **LOKESH N (39120062)** who carried out the project entitled “ **Flight Booking App Screen Using Figma**” under my supervision from February 2022 to March 2022.

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External Examiner

DECLARATION

I **LOKESH N** hereby declare that the Project Report entitled '*Flight Booking App Screen Using Figma*' done by me under the guidance of **Dr.V. NIRMALRANI M.E.,Ph.D** and **Dr.R.SUBHASHINI M.E., Ph.D.**, at Sathyabama Institute of Science and Technology is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering degree in Computer Science and Engineering.

DATE:
PLACE: CHENNAI

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SIGNATURE OF THECANDIDATE

ACKNOWLEDGEMENT

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I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Information Technology** who were helpful in many ways for the completion of the project.

TRAINING CERTIFICATE

CERTIFICATE

OF APPRECIATION



Macincode recognizes the hard work and dedication of

Lokesh M

*for the successful completion of an online course and a mini-project on
"UI/UX Master Design" in association with "PRIDE - SATHYABAMA INSTITUTE
OF SCIENCE AND TECHNOLOGY" from Feb 23, 2022 to April 6, 2022.*

CEO, Macincode Technologies

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ABSTRACT

- Smart phones have introduced great easiness in our daily life by mobile applications. Nowadays, it is possible to complete tasks on-the-go, without the need of computer.
- One of the facilities provided is the mechanism to buy flight tickets via mobile phones. However, in the development phase, often poor consideration of end-users' usability requirements leads to underutilization of such facility, thus decreasing potential profit of companies.
- The purpose of this work is to investigate usability problems for mobile flight booking applications on touch-screen phones and suggest solutions. Main expectations of users are presented from HCI (Human Computer Interaction) perspective and discussed through a case study.
- Questionnaire and interview methods were used for collecting data. Paper prototype has also been utilized to verify users' expectations of mobile flight booking more accurately.
- Results reveal that the users are very much concerned with the easiness and the lucidness of functions. Usability is a highly considerable subject for users to prefer a mobile flight booking application over booking tickets via online/ or agencies.

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CHAPTER 1

1.INTRODUCTION

Introduction to UI/UX:

The term UI/UX stands for user interface/user experience design and refers to the practice of designing digital products with a user-first approach.

In other words, the point of UI/UX design is to create a product that will be both visually appealing and highly pleasant to interact with.

A common misconception is that UI and UX come down to the same thing and that they are just one discipline, but that is not entirely true. They are separate disciplines that focus on different aspects of the user's journey with a digital product.

However, they overlap in many ways and are so closely connected that they've largely merged into one profession. Let's take a look at the main differences between UX and UI before moving on to discuss what the UI/UX design process involves and why it matters to you.

UI design relates to the appearance and feel of a digital product. It focuses on visual factors like buttons, fonts, colour schemes, images, interactive elements, etc.

So, what is user experience design, then? Well, it refers to the experience a user has interacting with your product. Its main focus is enabling seamless goal achievement for users.

You can look at the difference through the example of a car. The UX would be the mechanics of your car, like engine power, transmission type or fuel consumption. The UI would be the aesthetics, such as the livery, paint, rims, dashboard or seats. Or, you can imagine furnishing a home; think of the UX designer as the construction manager, and the UI designer as the interior designer.

Ultimately, the final product is meant to be pleasant-looking, functional and give users a fantastic experience in terms of performance and navigation. You can only have that if both the UX and UI design are up-to-par, and because they complement each other so much, today we are increasingly talking about a profession involving both skillsets.

If you're wondering what the UI/UX design process is like, let us take a brief look at the crucial stages and the focus of each.

INTRODUCTION TO FIGMA

- Figma is a collaborative interface design tool that's taking the design world by storm. Unlike Sketch, which runs as a standalone MacOS app, Figma is entirely browser-based, and therefore works not only on Macs, but also on PCs running Windows or Linux, and even on Chromebooks. It also offers a web API, and it's free
- Another big advantage of Figma is that it allows real-time collaboration on the same file. When using conventional "offline" apps like Sketch and Photoshop, if designers want to share their work, they typically have to export it to an image file, then send it via email or instant message.
- In Figma, instead of exporting static images, we can simply share a link to the Figma file for clients and colleagues to open in their browser. This in itself saves significant time and inconvenience in a designer's workflow.
- But more importantly, it means that clients and colleagues can interact more richly with the work, and review the latest version of the file.

There are two ways to run FIGMA:

Web

To run in mainstream web browsers, FIGMA relies on a source-to-source compiler to JavaScript. According to the project site, FIGMA was "designed to be easy to write development tools for, well-suited to modern UI/UX development, and capable of high-performance implementations. When running Figma code in a web browser the code is precompiled into JavaScript using the compiler. Compiled as JavaScript, FIGMA is compatible with all major browsers with no need for browsers to adopt FIGMA. Through optimizing the compiled JavaScript output to avoid expensive checks and operations, code written in FIGMA can, in some cases, run faster than equivalent code hand-written using JavaScript idioms.

App

The Figma mobile app lets you access your files and test prototypes from anywhere. You can also share files, browse multiple workspaces, and mirror frames from your desktop to your mobile device.

CHAPTER 2

AIM AND SCOPE

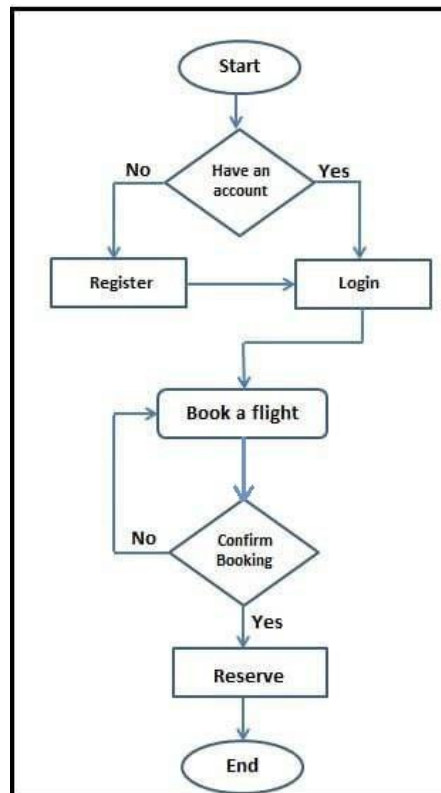
- **AIM**

To Analyse the performance of proposed work of core value of doing this project is to put the creative thinking on the work and give a good, fabulous design using the appropriate tools.

- **Scope**

- The scope of our project is to create a user interface design screens using figma for the flight booking app.
- To Analyse the performance of proposed work of core value of doing this project is to put the creative thinking on the work and give a good, fabulous design using the appropriate tools.

IDEATION MAP:



SYSTEM SPECIFICATION AND METHODS

Software and Hardware Requirements:

- 8 Gb Ram or more
- 1280 x 800 minimum screen resolution
- 8 GB of available disk space minimum
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor
- UI/UX, Java and Figma required
- A virtual device must be installed to run the application(Optional)

Work Environment

Font End Developer: The front-end developers generally work at the client side designing the User Interface of the application and add the requirements.

Back-End Developer: The back-end developer is a person who is responsible for the back-end development that interacts with the server. They oversee Firebase applications.



CHAPTER 3

APP DESIGN STUDY AND ANALYSIS

Analysis

Problems and Solution

There are more problems in developing an app. We faced a lot of challenges while designing the UI also while developing the backend but those problems could be rectified easily

Problems

During the initial phase of development, I faced a lot of hurdles such as the alignment could not be rendered properly, couldn't fix the image properly, the design could end up messy, padding was not set properly. Developing an UI/UX is not an easy task. It takes a lot of creativity, uniqueness and brainstorming sessions to come up with a nice App design. Only an App developer can talk about the challenges they go through on regular basis. App developing which are liked and appreciated by target market and clients are mostly the result of constant development and regressive critical thinking

On the contrary, there are many challenges faced by UI/UX developers. One such thing is making the app load faster. During the initial phase, the app could face a lot of bugs or could load slowly or could crash. These kinds of things would irritate the client and the app could fail. One of the toughest challenges faced by app designers is making sure the app works perfectly fine and doesn't crash. Sometimes, the app may work on one mobile and wouldn't work on another one. App developers should make sure these kinds of things doesn't happen, sometimes these issues will develop because of the structure of the mobile or due to a software. Time spent detecting the source of a problem means a delay in tackling the problem itself.

History of UI/UX:

We talk about UX, or user experience, quite a bit. That's because it's a fundamental aspect in the world of web design. To put it plainly, you want your users to have an experience that's worth visiting your site. But UX isn't that new of a term. In fact, the history of UI and UX goes back as far as web design started.

Over the years, we've seen the evolution of UX and UI transform the way people use the Internet and traverse websites. Here's a little bit about that evolutionary history.

Cognitive psychologist and designer Don Norman coined the term "user experience" in the 1990s—but UX predates its name by quite some decades.

Use of UI/UX:

You can use it to do all kinds of graphic design work from wireframing websites, designing mobile app interfaces, prototyping designs, crafting social media posts, and everything in between. Figma is different from other graphics editing tools.

What's UI design?

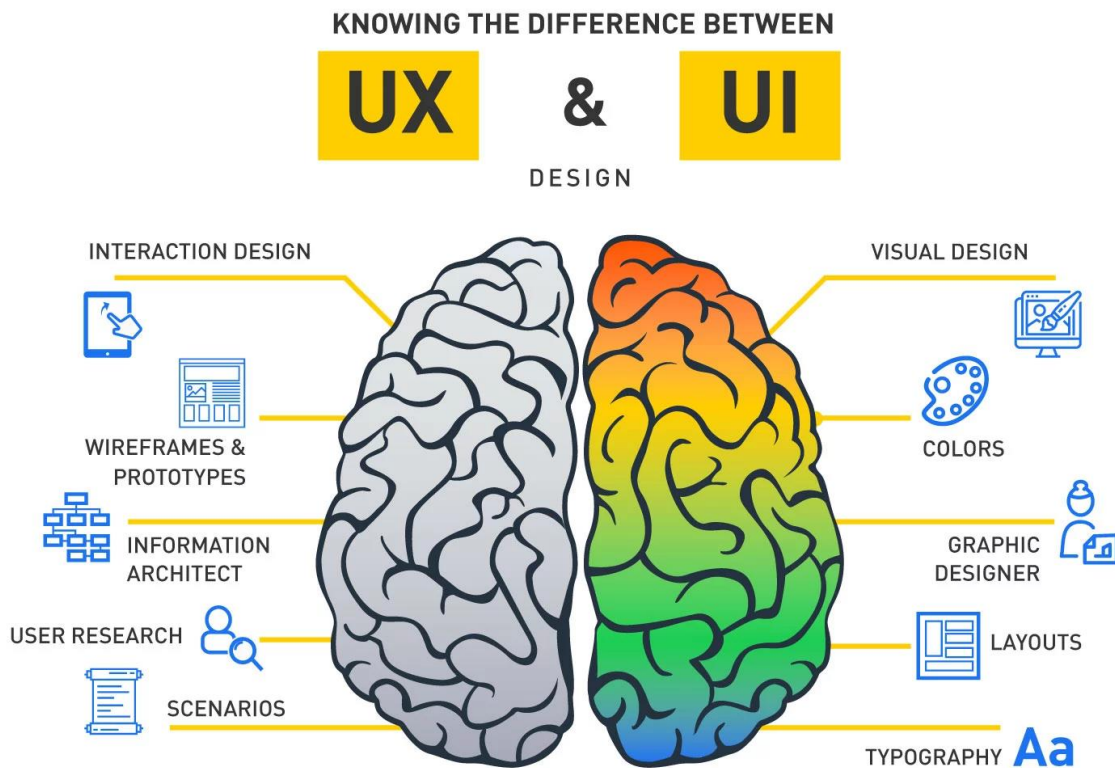
User interface (UI) design is about building interfaces with a focus on styling and interactivity. The UI designer's goal is to create an interface the user finds easy to use and aesthetically pleasing.

The word "interface" refers to the access point where a user interacts with a software application (e.g., Figma, Sketch), a browser-based website, or a hardware device (e.g., a smartphone touchscreen). A UI designer explores all the interactions and behaviors a user takes with a product to create an interface that best adapts to the user's needs.

What's UX design?

User experience (UX) design is the process designers use to create products that deliver relevant and valuable experiences to users. According to Don Norman, the co-founder of Nielsen Norman Group and the one who coined the phrase "user experience," the term includes "all aspects of the end-user's interaction with the company, its services, and its products."

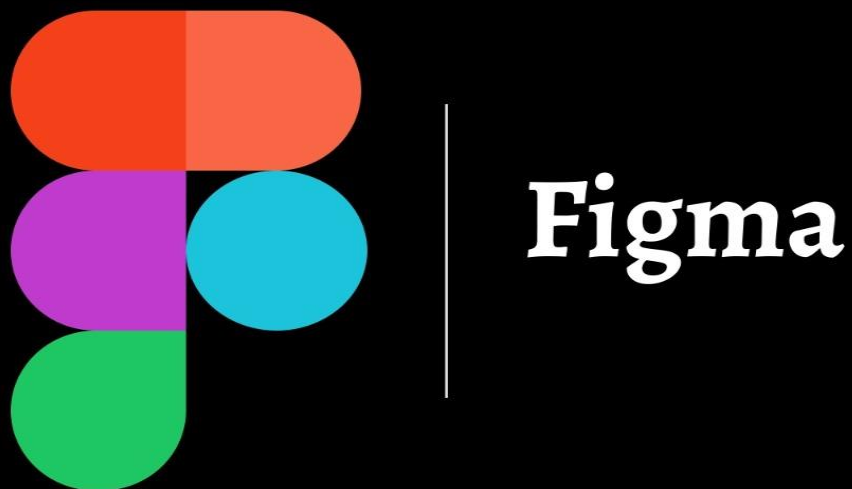
UX designers create meaningful experiences by integrating elements of branding, marketing, engineering, design, and usability into a product. Their job requires extensive user research to understand their user's mindset, feelings, and goals and to connect this information to the product.



How To Use Figma?

As we mentioned earlier, Figma is a web-based app. All you need to start using the app is a desktop computer or a laptop with a good browser and an internet connection. Then you can visit [**Figma website**](#) to register a free account. And you can start working on your designs right away.

Figma has a very beginner-friendly editor where you can create designs from scratch or using pre-made templates. There are plenty of resources for learning how to use Figma.



UX Should Be Seamless Across Devices :

Regardless of whether a user is accessing your services on a mobile app, desktop, or mobile website, the transition between them should be seamless and consistent. All the design elements should mirror each other and that's one of the important UX Design Principles (for example, you shouldn't use red for the desktop and green for the mobile).

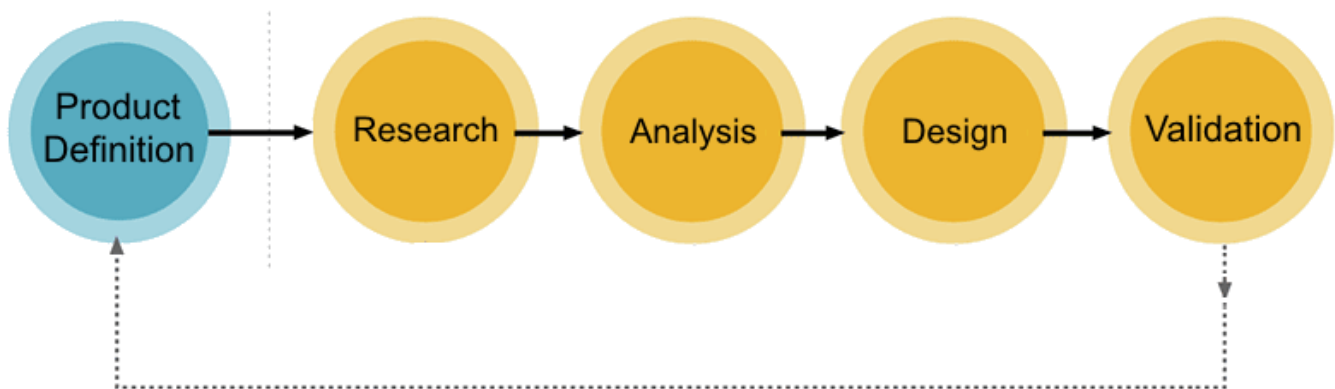
With the proliferation of new devices in the market and the rise of mobility, users expect brands to deliver an accessible, efficient, and movable experience as they change devices.

As a result, it is no longer enough for brands to provide solutions for various channels; they must blur the lines between multiple devices' experiences.

For example, if a user is traveling and wants to continue watching the show on his mobile that he was watching on his desktop last night, he should be able to move seamlessly without difficulty.

A consistent experience doesn't just make things simpler for users, it also creates brand awareness.

PHASES IN UI/UX PROCESS:



1. Product Definition

Product Definition is the first phase involved in the user design process. The team responsible for this will collect the user requirements based on their business environment.

It's very much essential because understanding about the real scope of the product and their existence happens in this phase.

It's simple; before beginning the work, enlighten your UI/UX designers about the requirements!

People involved in this phase are Design Team, Business Manager, and Product Manager. The entire team should consult with clients in their environment. Analyze their needs within the framework of your operation.

The significant outcomes of this phase are User Personas, User Stories, and Use Case Diagrams.

2. Research

The research is the most crucial element for a designer. The designing team studies how the present system works for the current client proposal. The three main functions at this stage are:

- Have an understanding of the competition.
- Making a thorough study of your existing domain.
- Going through competitor strategy to test outcomes.

The Research process should also involve an understanding of the latest UI/UX trends, design principles, and guidelines.

3. Analysis

In this phase, make use of the things collected in the Research phase. With the help of the information received, create hypothetical personas, and experience maps.

- **Hypothetical Personas:** Creating hypothetical scenarios help the designers to know about the various persons who will be the users of your product. It allows depicting the realistic representation of the ultimate product. The design team can figure out how it is going to look like after delivery.
- **Experience Maps:** Experience maps shows the user flow within your final product. All these are done using visual representations through proper interactions with the client in the product definition phase.

4. Design

In the design process, we finally end up giving life to ideas that we have collected in the above three steps. It's time to work on the final graphics now. The design team will execute the final design in this phase.

The significant outcomes of the designing phase are:

Sketching: The designing phase begins with sketching. The designers usually make hand made sketches to visualize the concept with simple terms. The UX/UI designers can stick to a particular option after the sketching process.

Creating wireframes: A wireframe is a visual structure that depicts the page hierarchy and the elements in the product. A wireframe is considered as the backbone of the product. It's also called the skeleton of the design. It's mostly about the overall look of the final product.

Creating Prototypes: Prototypes concentrate on the feel of the UI/UX product that one is designing. It's more about the interaction experience. Prototypes give you the effect of a simulator.

Creating Design Specifications: Design specification includes user flow and task flow diagrams. It depicts the overall working and the style requirements of the UI/UX product. It describes the processes and graphical elements to create amazing user experiences.

5. Validation or Testing

Testing is the phase that determines the overall quality of the end- product. The testers make notes of the things that have to be improved and send them back to the respected team for correcting the errors. While evaluating your final product, there are certain factors that one needs to keep in mind. They are as follows:

- Is the system user-friendly?
- Is it flexible and easy to operate?
- Does it solve the customer's issue?
- Is it credible and attracts the users to come back every time they need your service?

CHAPTER 4 RESULTS AND DISCUSSION

- By the end of the project I was able to create good designs and understood the complete concept of building Ui s.
- Got to know how the user interface is created and how user experience for the appropriate designs.
- Faced many technical challenges and simultaneously overcame it with great effort.
- Figma is very impressive tool.
- Good designs always comes from good inspiration.

CHAPTER 5

SUMMARY & CONCLUSION

- The results should be useful if generalized and used by the mobile applications designers regardless of what kind of application is to be developed.
- This paper has presented main challenging issues with regard to usability of mobile flight booking for touch-screen devices
- This paper has presented main challenging issues with regard to usability of mobile flight booking for touch-screen devices.
- We verified previous research findings of usability of web-page and mobile applications and devised touchscreen specific suggestions.
- The results should be useful if generalized and used by the mobile applications designers regardless of what kind of application is to be developed.

REFERENCES

- [1] www.Google.com
- [2] www.GreekofGreeks.com

CHAPTER 6

APPLICATION SNAPSHOTS

