UI/UX DESIGN ON TWEETECH

By

Kazi Shamima Afroz Tamanna

ID NO: 183-15-12050

This Report is presented in Partial Fulfillment of Requirements
For the degree of Bachelor of Science and
Engineering

Supervised By

Ms. Farah Sharmin
Senior lecturer
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APPROVAL

This project/internship titled "UI/UX DESIGN", submitted by Ms. Farah Sharmin, ID No: 710000864 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial gratification in the requirements for the standard of B.Sc. in Computer Science and Engineering and approved with regards to its design and materials. This presentation will be held on August 11, 2021.

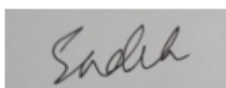## <u>BOARD OF EXAMINERS</u>

Chairman

Dr. Touhid Bhuiyan
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Md. Sadekur Rahman
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
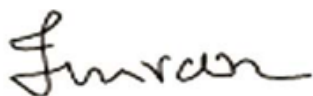Daffodil International University

Internal Examiner

Moushumi Zaman Bonny
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

External Examiner

Shah Md. Imran
Industry Promotion Expert
LICT Project, ICT Division, Bangladesh

DECLARATION

I hereby announce that the internship has been performed by me under the guidance of my supervisor Ms. Farah Sharmin, department of Computer Science and Engineering at the Daffodil International University. Furthermore, I declare that neither this venture nor any point about this internship report presented elsewhere to the accolade associated with an education diploma 0r degree.
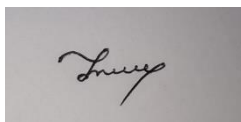
Supervised by:

Farah Sharmin

Ms. Farah Sharmin
Senior lecturer
Department of CSE
Daffodil International University

Submitted by:

Kazi Shamima Afroz Tamanna
ID: 183-15-12050
Department Of CSE
Daffodil International University

ACKNOWLEDGEMENT

First of all, I like to thank Allah. With the blessing of Allah, I was able to complete my final year internship successfully. At this point, I may describe this as opening up the front door to convey my thankfulness and respect to my offer to the honorable supervisor Ms. Farah Sharmin, Department of Commuter Science and Engineering. For helping, persuading, and handling me on this internship. My internship was not possible to finish successfully without his help. Also, thank her quite definitely for supporting me in choosing this interesting topic. I would like to convey my heartiest thanks full of the almighty Allah and the head department of CSE for his help to finish off my venture as well as to do other faculty associates and the personnel of the CSE department of Computer Science and Engineering. Lastly, I should accept with thanks the value of HUMAN-COMPUTER the assistance and the patients of my parents.

ABSTRACT

The UX/UI is kind of making use enhances the client encounter and customer care that ultimately will assist boost the number of consumers of certain applications. Using the scientific advancement inside the 21st-century, everybody wants to obtain the best technological innovation without spending lots of their attempts and stressful their active minds. The main goal of the company is to increase its revenue and boost the expansion of the organization. UI/UX layout has a necessary place in attaining this goal. The UI/UX model of the application increases the client working experience and customer pleasure and ultimately aids in boosting the volume of uses of your particular system. Each display, webpage, option, and also another graphic aspect while using the software could be the user interface of the particular program.

TABLE OF CONTENTS

CONTENTS   **PAGE**

CHAPTER
CHAPTER 1: INTRODUCTION TO UX/UI

CHAPTER 2: FACTORS, PROCESS AND CHARACTERISTICS OF USABLE PRODUCT

CHAPTER 3: HUMAN-COMPUTER INTERACTION

CHAPTER 4: INTERACTION TO DESIGN

CHAPTER 5: DESIGN PSYCHOLOGY BY UNDERSTANDING AGE

CHAPTER 6: PLANNING AHEAD

CHAPTER 7: FUTURE OPPORTUNITY & CONCLUSION

LIST OF FIGURES   **PAGE**

CHAPTER 1

INTRODUCTION TO UI UX

1.1 Introduction to UI/UX

UX style refers to consumer's encounters. UI design and style identifies the end-user interface. Both elements function close together. Despite their specialist professional relationship, the functions themselves are usually specific. UX format is a lot more reasonable in the specialized region, UI is closer to graphical design and style, it is commitments are more complex

1.2 Internship Objects

I have already completed my internship in 90 days. As I recently concluded my internship. And my next goal would be to build a career in "UX/UI". My internship company goal is completely to make and work out for me, proper for job committing to make place position segments requirements. Nowadays the job opportunities in this sector are huge. The study discovered that 87% of managers have said that using the services of UX creative designers is a main priority, plus a separate LinkedIn report learned that UX design and style is among the top 5 most in-require work capabilities of 2020. All of which is to say there is absolutely no lack of possibility for UX layout experts.

Also, UI layout and design is certainly a very good profession, giving sufficient prospects and competing for salary. There are, the reality is, a large number of good things about a task being a UI developer. When I have an incredible eye-sight for graphics in addition to a sound progressive impulse, UI design can be an awesome method to scratch that itch.

There are so many scoops of this sector in online/remote and offline jobs. In the future, I want to open a design and development agency.

1.3 Introduction to Company

TweeTech is a Bangladeshi Web Design Company in Bangladesh, full services website design and development company with a strong focus on creative design and web security. For over 6 years, they have been creating a high-performance website, software, and app that gives the latest digital experience for e-commerce service and financial services, insurance companies, school, college user-friendly experiences. They understand that creating user-friendly experiences based on UX best practices, market investigation.

1

The company addresses:

Tropical Alauddin Tower and Shopping Complex

Uttara, Dhaka-1230

Bangladesh

Website: https://www.tweetech.agency/

Email:info@tweetech.agency

1.4 My Report Layout

In my report, I pointed out the basics of UX/UI. In "chapter 1" I look at the basic intro of my internship. I also give brief information about my internet company.

CHAPTER 2

FACTORS, PROCESS, and CHARACTERISTICS OF USABLE PRODUCT

2.1 UX Factors

Valuable
Accessible
Desirable
Credible
Findable
Usable
Useful

2.2 UI Factors

Development Factors
Visibility Factors
Acceptance Factors

2.3 UX Process

Traditional UI
Learn UX
Agile UX

2.4 UI Process

Strategy
Research
Analysis
Design
Production
Launch
Beta Launch
Evaluate

2.5 Usability

Functionality is more than simply whether customers can do responsibilities easily (alleviate-of –use). It also works together with end-user satisfaction for a web website to become functional; it has to be revitalizing and great looking, also.

Usability defines by 5 quality components

1. Learnability
2. Efficiency
3. Memo ability
4. Error
5. Satisfaction

Usability

There are many crucial top-quality attributes here
Utility: whether it provides the feature needed
Usability: How easy and pleasant these features are to use
Useful: Usability + Utility

2.6 Characteristic of useable products

There are five characteristics of usable products

- Effectiveness
- Efficiency
- Engagingness
- Error Tolerance
- Ease of Learning

2.7 Effectiveness

Effectiveness is about whether consumers can complete their goals having a substantial amount of accuracy and reliability. Most of the potency of an item comes from the assistance offered to consumers after they assist the item, for instance, fixing credit card field cards filled to ensure that it only allows a sound bank card amount access can reduce information entrance Problems and assisting end-users to carry out their duties effectively. There are various ways to prove that the key is usually to be as helpful; as possible within an important strategy to the consumer.

CHAPTER 3

HUMAN-COMPUTER INTERACTION

3.1 HCL-Human-Computer Interaction

Computer interaction is a multidisciplinary discipline of research concentrating on the style of computer systems and, specifically, the interaction between humans and personal computers. Although initially worried about computers, HCL has since broadened to pay for almost all forms of information technology.

3.2 The Meteoric Rise of HCL

HCL surfaced in the 1980s together with the coming of private computing, just like models including the apple company Macintosh, 18m PC 5150 and commodore 64 began turning up in residences and workplaces in culture figures. For the very first time, stylish electrical techniques have been offered to common buyers to make use of, for example, online games units and data processing aids. Consequently, as computers have been no longer an area of undefined size, pricy tools exclusively developed for specialists in professional situations, the requirements to make individual-undefined computer discussion which was very simple and production at a lower price experienced consumers grew to become increasingly essential. Looking at the beginning, HCL would develop to incorporate many disciplines, such as personal computer technology, intellectual science, and individual- undefined aspects of design.

3.3 The UX value of HCL and its Related Reams

HCL is really a large area with overlaps places including consumer undefined centered design, user interface (UI) design, and customer experience (UX) design and style. In many ways, HCL was the forerunner to UX layout.

3.4 HCL and UX

Despite that, some variations keep between HCL and UX style. Human-undefined personal computer interaction enables UX and UI developers around the world to produce much better, more end-user undefined concentrated computers, HCL is priceless in ensuring computer systems are equipped for productive and instinctive human being use

CHAPTER 4

INTERACTION TO DESIGN

4.1 IXD

Interaction design (IXD) IS the appearance of enjoyable products where a designer's focus goes past the product in development to add how customers will contact it, thus close up examination of users' needs, restrictions, and context, and so on. Empowers creative designers to change the output to match the accurate design.
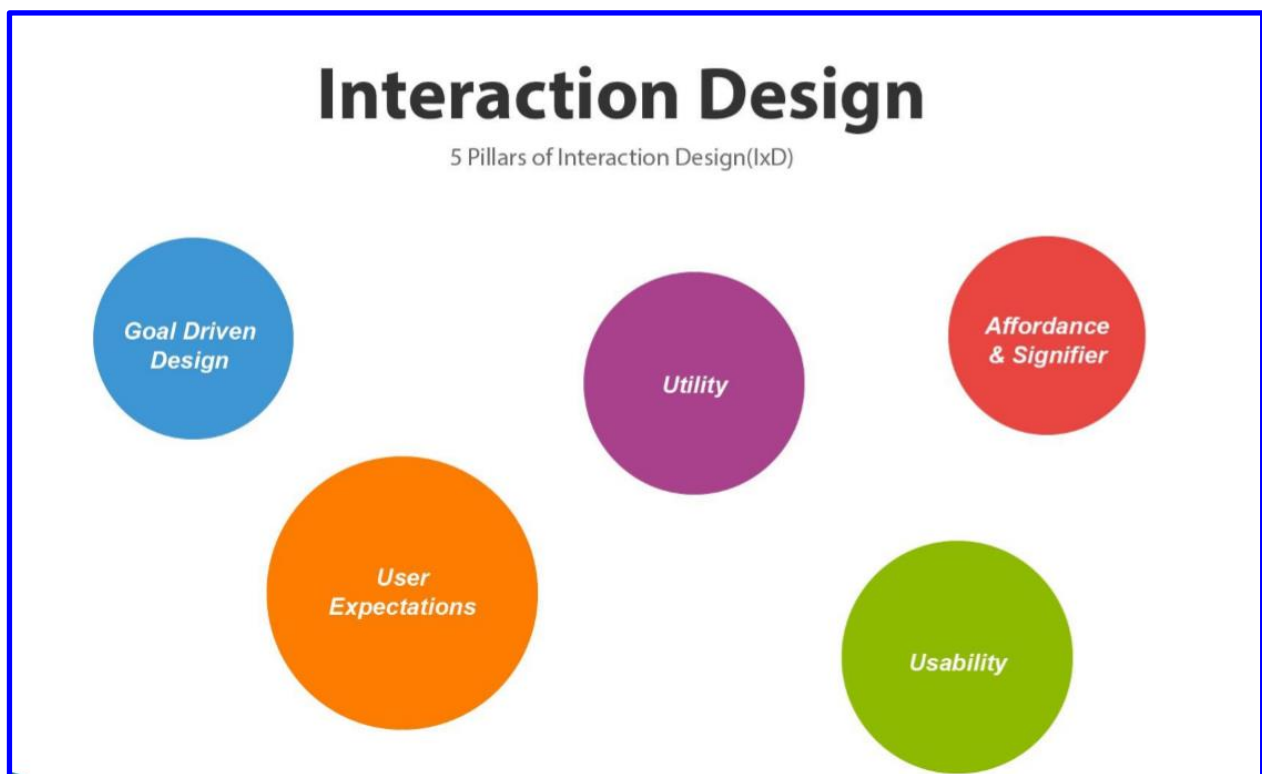

Figure: 4.1 Interaction Design

4.2 5 Dimensions of IXD

- **1D Words-** The dimensions represent the semantics, or meaning, and the nature of the user's interaction. Words are powerful, as we can process them quickly, implicitly, yet they profoundly influence us. A single word carries considerable meaning, as words are open to interpretation. For this reason, the terminology we use must be familiar to our intended users, accurately represent the actions they denote, conveyed in a tone that is appropriate for the setting, and used consistently throughout the product.

- **2D visual Representation –** This aspect means the components which are not in words in merchandise, for example, the typography, diagrams, icons, along other artwork. These components are no significantly less potent than phrases since they are designed for digesting imagery just like quickly and taking out meaning inside a split next. 2D aesthetic representations are common in end-user interfaces, and that we have already saved a huge number of these factors in long-term memory space, which allows understanding displays – if the layout allows – immediately to the key benefit of end-user practical experience. Four cases where 2d graphic representations happen to be chosen are symbols, foreground/background shade differences, borders, and use of visible hierarchies.

- **3D Physical objects –** The concrete of management, such as personal computer keyboard, mouse, touch screen, display, joystick, video games controller. The in1D term, 2D aesthetic representations, ans3d bodily things outline the user's interaction offering perceptible options to guide their measures and permit aim completion.

- **4D Time –** some time wherein the user interacts with and uses the first three proportions, and, by way of example, in which they can look into the progress of such interaction. 4d time also entails audio, video, and animation, every which represents another means of conveying info and improving the consumer experience in conversion.

- **5D Behavior –** This dimension involves "Measures, operations, business presentation, or reaction". Sterling silver around the notion of a 5th connection design vocabulary aspect.
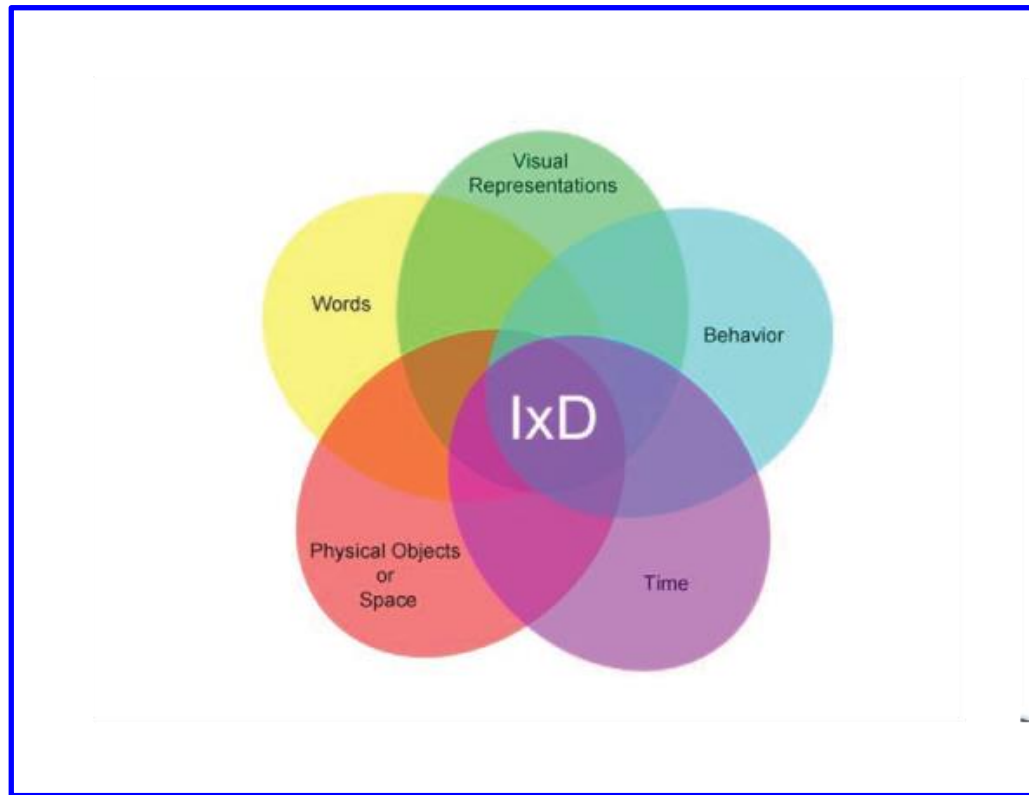
5 Dimension of IXD

Figure 4.2 5 Dimension of IXD

4.3 UX Methods and Deliverable

The deliverables for a task are the tangible report in the function that happens, whether that really works was investigating or style. Several of the classic deliverables that come out of UX jobs are user friendliness-examination studies, wireframes and prototypes, site maps, personas, and flowcharts.

The very idea of customer experience (UX) has existed earlier than the abbreviation UX itself. If you execute end-user analysis strategies like questionnaire or talk to, this is a process of the customer – undefined structured layout aiming to increase the experience with customers for products and services

4.4 Service Blueprint

A roadmap that screens all of the touchpoints of the consumer along with the brand name, plus the crucial interior function associated with it. Useful to envision the way accompanied by customers across several routes and just hope to potentially increase the stream.
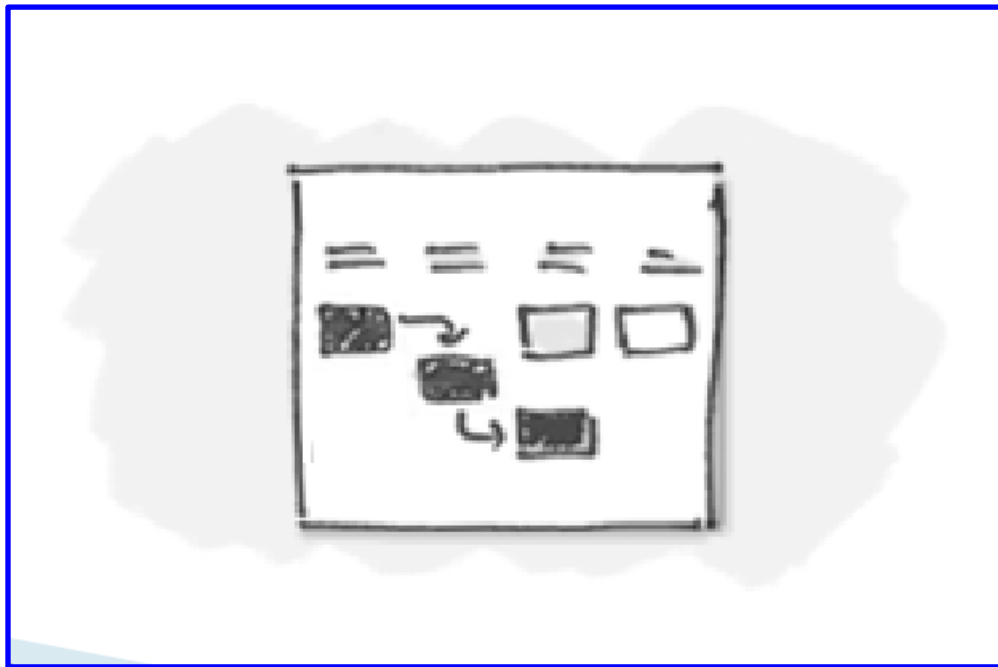

Figure 4.3 Service Blueprint

4.5 Consumer Journey Map

A diagram that looks at the number of steps customers undertake since they interact with the support. Permits make to frame the consumer's motivations and requirements in each move of the trip, producing style remedies that can be suitable for each
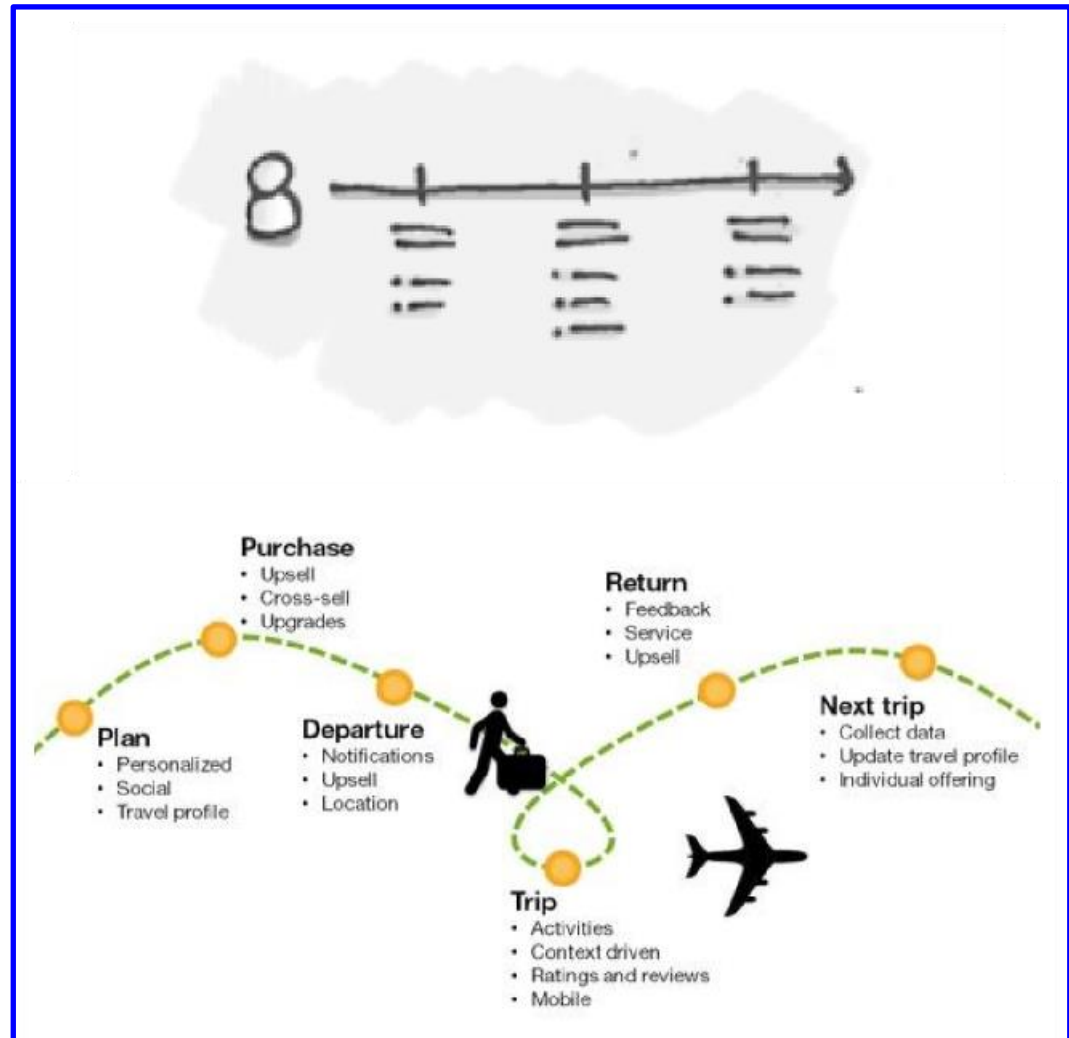

Figure 4.4 Customer Journey Map

©Daffodil International University

4.6 Personas:

A relatable picture of the target audience that shows demographics, actions, and motivations through the roll-out of a fictional persona. Personas make it easier for makers to make empathy with consumers through the entire layout approach.
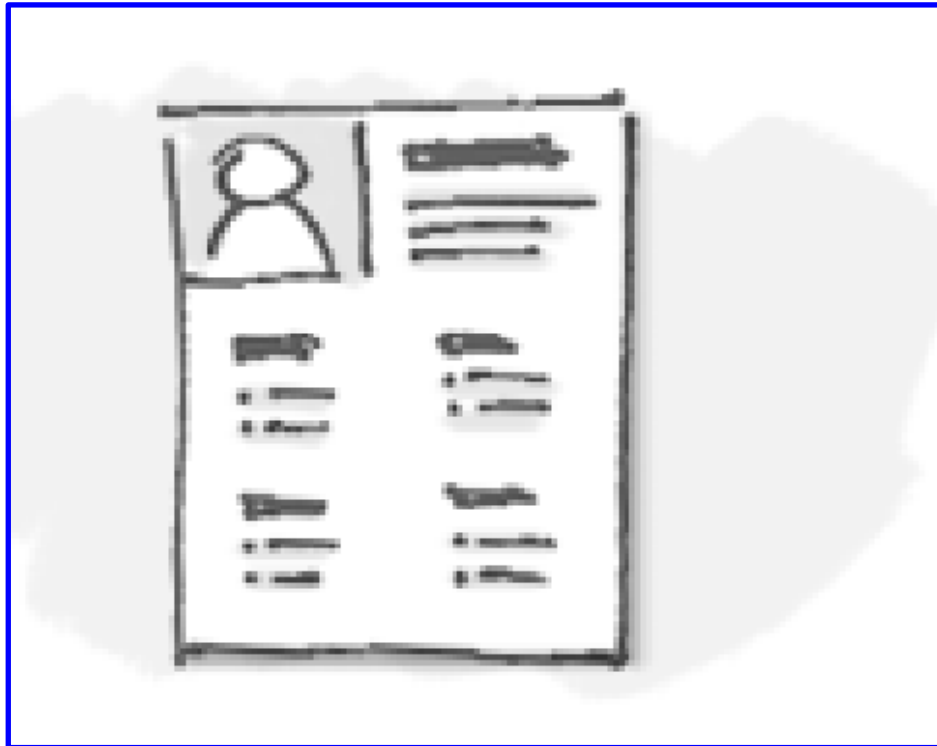

Figure 4.5 Personas Demo

4.7 Ecosystem Map

Visualization of any company's electronic digital properties, the relationships between their purposes inside the all-around making plan will give ideas around the best way to leverage new and present assets to have the brand's business objectives.
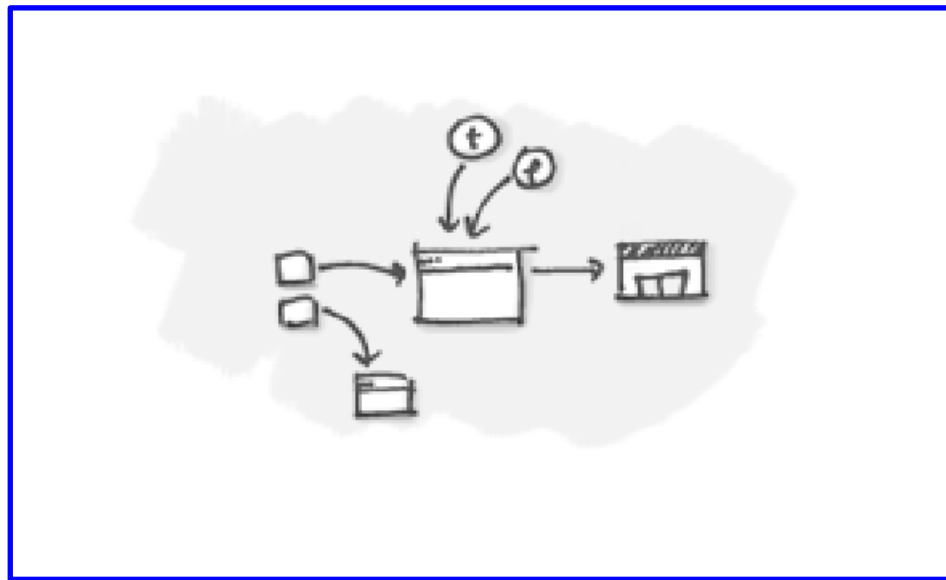

Figure 4.6 Ecosystem Map

4.8 Brainstorming

The collective technique of generating constraint-free to change tips that answer a particular innovative brief. Enable the team to visualize a large selection of design and style solutions.

Figure 4.7 Brainstorming
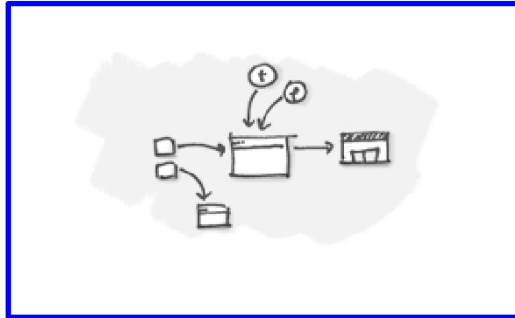
4.9 Storyboards

A comic strip that demonstrates the combination of actions that consumers have to take when using the merchandise. Translates functionalities into real undefined existence scenarios, helping creative designers create empathy with the client using creative designers creates empathy with the client while using a very glance at the product extent.
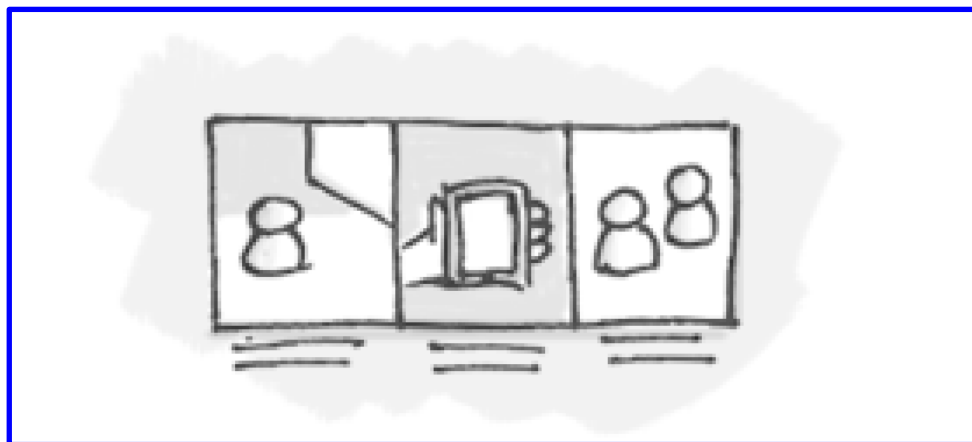
Figure 4.8 Storyboards

4.10 User Flow

A visual representation of any user's circulation to finish takes inside the item. It is an individual standpoint from the website organization. Making it easier to determine which steps could be better or redesigned.

Figure 4.9 User Flow

4.11 Card Sorting

An approach that is composed of requesting consumers to group content and functionalities into open or closed classes will give content hierarchy company and circulation.
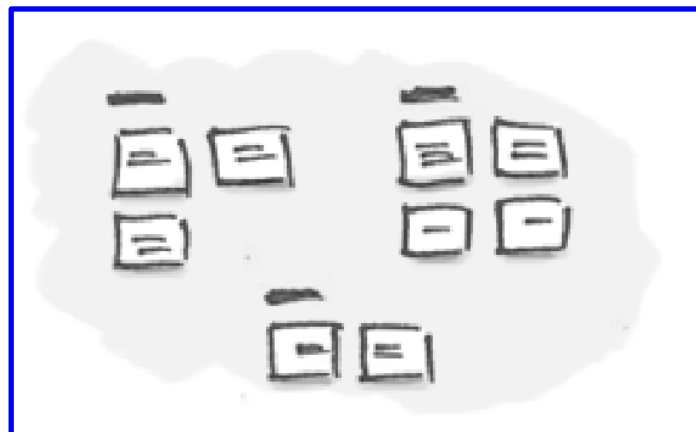
Figure 4.10 Card Sorting

CHAPTER 5

DESIGN PSYCHOLOGY BY UNDERASTING AGE

5.1 Underrating People to Improve Design

Figure 5.1 UX Process

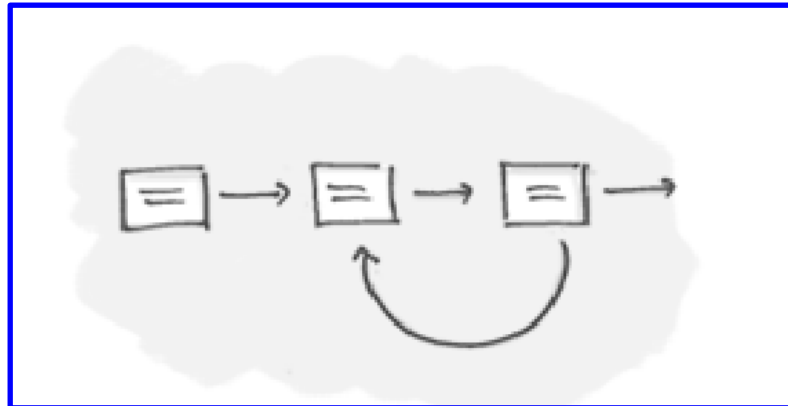Being a designer, it is essential to understand the mindset of the customer and exactly how it is included in patterns.

Why psychology?

Developing a simple comprehension of mindset will let knowing better recognize that emotional approach, and comprehend why users respond in many ways. Additionally, it allows protecting decisions confidently with understanding the reason for why produced and the way it seems sensible. "Because it seems nice" or "that's the craze now" is not a justifiable nor expert explanation to produce.

Mental model

Ever thought about why the most famous app is beginning to check the same? No? Just available Instagram, Airbnb, apple music, Twitter as well as moderates would find it hard to distinguish the various programs? It all often makes use of the exact same major, striking headlines with circular sans-serif typefaces paired with minimal background and plenty of negative places.
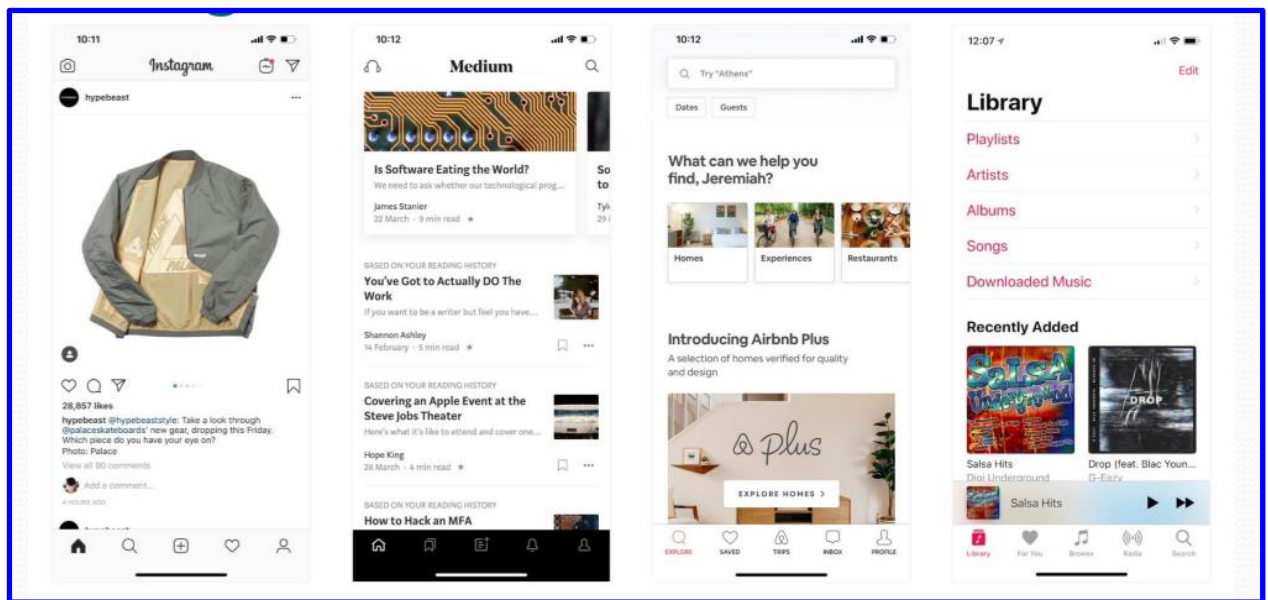
Figure 5.2 Mental Model

Mental models are formed through regular consumption of a method and the understanding of the way it operates. Mobile app tiredness is a difficulty. End users often exchange ideas that are built around a familiar process into another that seems similar while they started sick and tired of relearning a whole new program every other Time.

Focal Point Principal

Mental versions are shaped through regular use of a system and also the understanding of how it works. iPhone app exhaustion is a real issue. Consumers often shift objectives they constructed around a familiar process onto another that looks very similar because they have been sick and tired of relearning a new program every other Time.

Users learn from examples

The easiest way to understand this theory would be to create tutorial videos or walkthroughs for every single new feature developed. But there are subtle and much less overwhelming methods that could incorporate this design.

Figure 5.3 Payment demo

5.2 Age Differences

Design for different ages is very important for two reasons. First, disregarding a full end-user base like the elderly alienates them from encounters. And let's be realistic. Secondly, younger users properly are tomorrow's workers. Should they stumble upon an internet site and also have a terrible experience, which will most likely stick to them and condition their perception of the site or assistance.

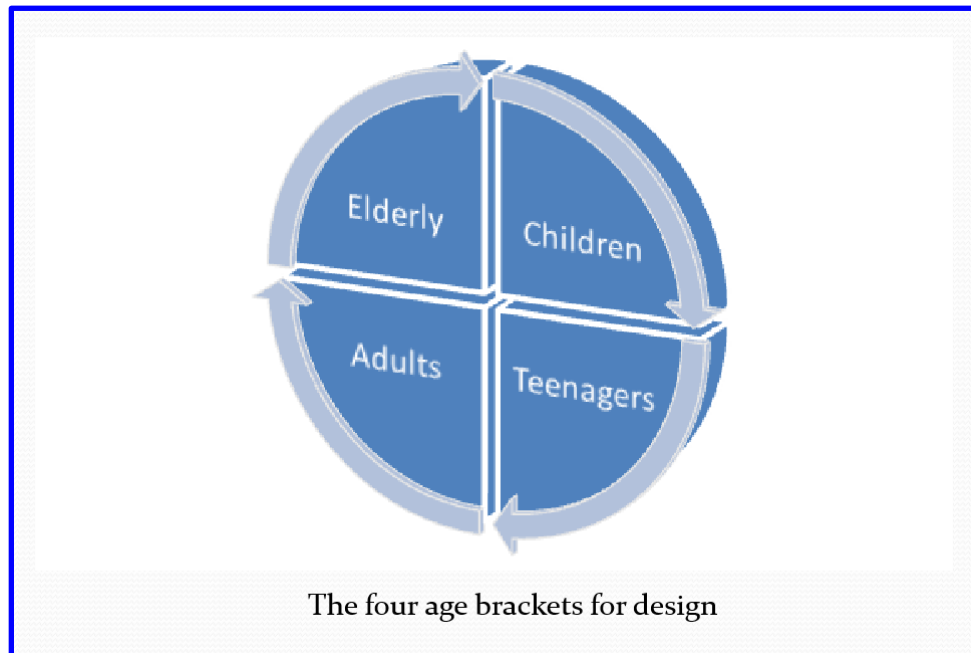

The four age brackets for design

Figure 5.4 Age Brackets

5.3 Designing for Early Years

The influence of internet sites is most enhanced with youngsters, as soon as the online was youthful; the training program found laptop or computer capabilities as high end. Time has modified, and the skills have grown to be main to society.

Figure 5.5 Early age Design

5.4 Designing for Teens

As children grow up; electric motor skills and compression grow to be a lesser limiting element. Older children and young people often get experience with computers through university research and entertainment, even though this does not suggest they are fully aware of how computer systems function completely.

Following people's culture is key to attracting teens.

- Making website teenager-helpful indicate
- Trying to keep to the UI clear
- Favoring graphical articles to textual content
- Making use of animation and seem
- Making sure this content is not basic that this presents itself as childish

5.5 Designing for Later Years

Seniors obtain it the worst about targeted design. Although very many studies have been carried out into human behavior and HCI for the youngest, the growing age group of elderly people - who happen to be much more familiar with an entire world without having the website as compared to it - are most often much less catered to. Aging adults often practical experience a fall in dexterity and electric motor abilities, which impacts website utilization. Many of them may be utilizing the web for the first time, and as their development years were at the same time when personal computers along with the internet were not a part of the well-known community, they are more unlikely to battle the technologies as fast as many other years. In addition, getting older signifies a fall in wellness, which could impact internet connections. Moreover, they are usually centered on connection and far more life experience, they might offer advantages in resolving difficulties and parsing specialized content. makes it difficult to take pleasure in owning a target audience that is certainly more prone to take pleasure in the intricacies they offer.

5.6 Age Matters

For building a website for kids, adults, or the entire or entire family, age affects how it will probably be used and recognized. young kids are still creating in body and mind, and elderly people encounter problems of theirs. Teen's adults have particular aims when surfing around the web to understand details differently.

21

One of several main rules of website design is user-friendliness, even though it will be improper to assume that site visitors have similar tips, targets, and perceptions, we still have to generalize to some degree to ensure to make well-timed decisions.

only by searching objectively at that utilizing the website can aspire to bring in the biggest probable target audience.
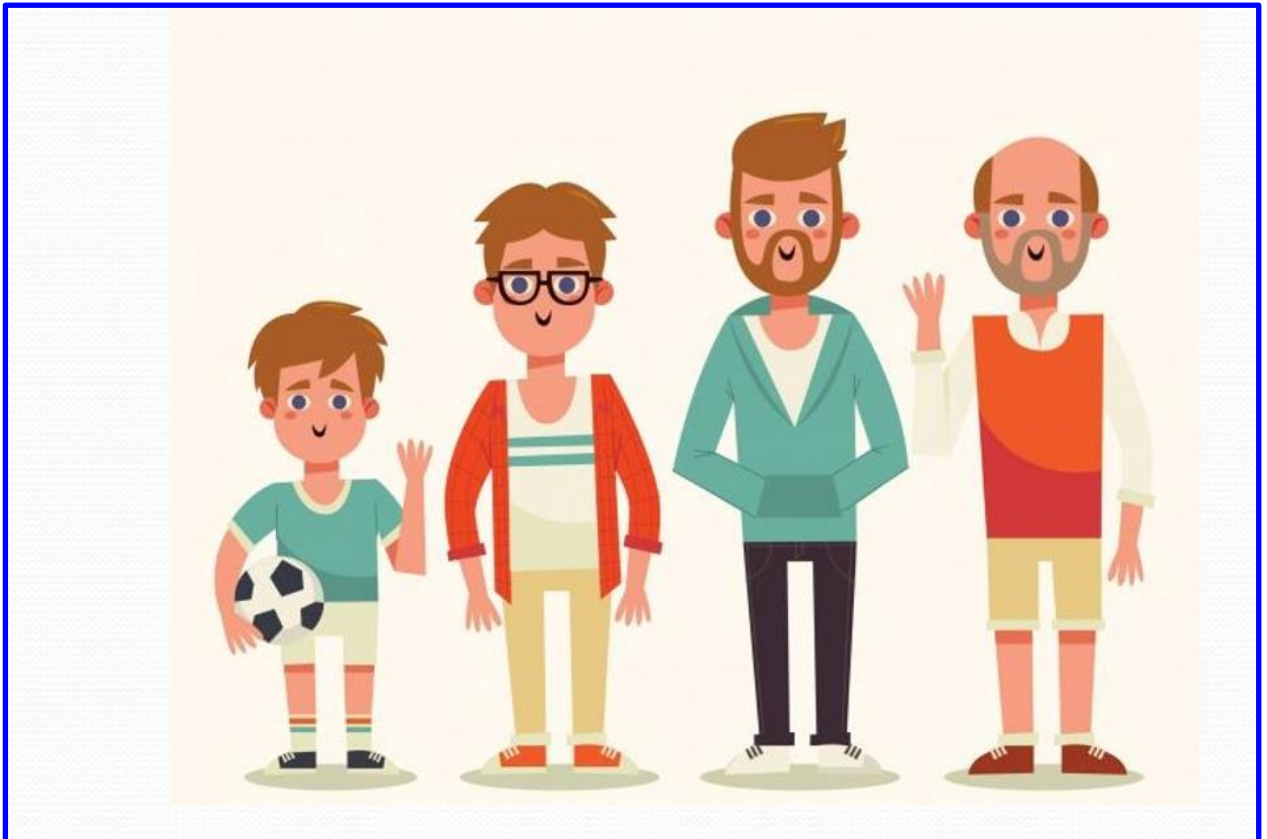
Figure 5.6 Age matters

Maintaining the website accessible to the elderly, match the criteria for growing up, always keep teens engaged, and make work youngsters- pleasant. Every single internet consumer is different, but serval many years of end-user may want the water you provide

5.7 Gender Difference
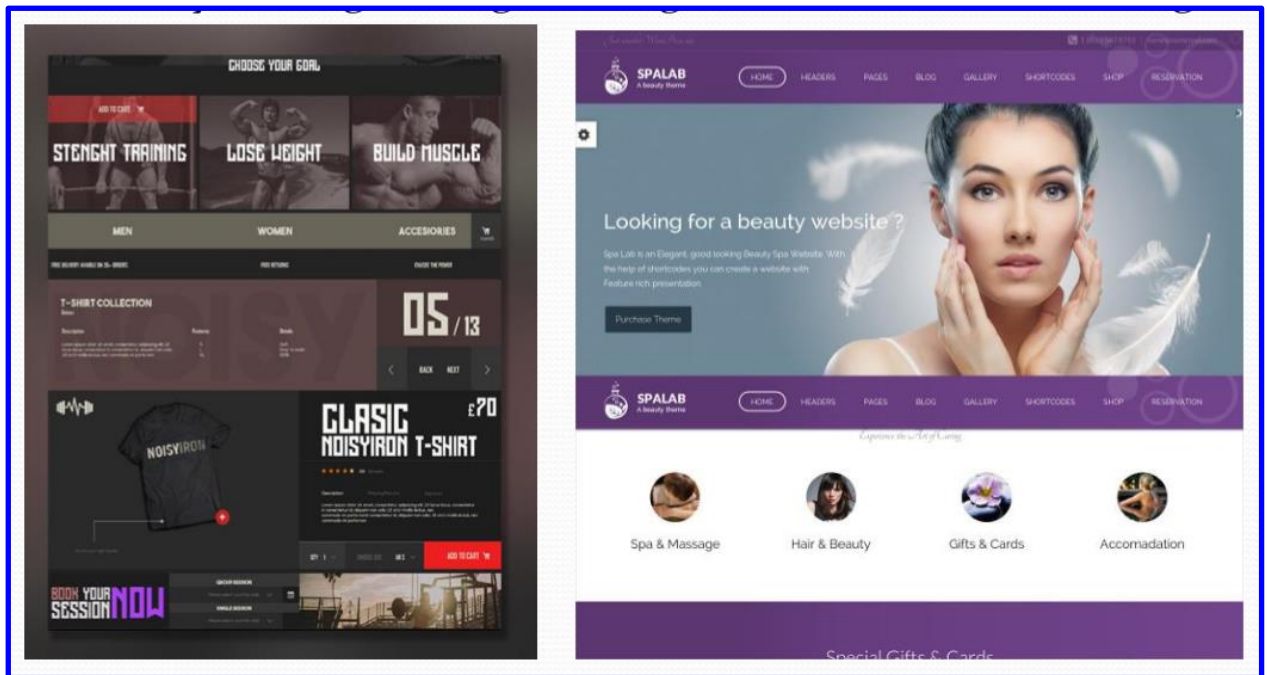
Figure 5.7 Gender Difference

It is all- natural to attempt to get yourself to take care of what is driving the rise in popularity of a system by looking at the gender, age, schooling, of them using it.

5.8 Growth in User Experience Over Timing and Learning Curves

Enough time necessary to reach skills is pretty simple, but the contour quickly flattens off since we achieve the highest possible in the item. There exists a bit more proficiency after getting to competence, such as finding out how to modify the volume of caffeine employed to warm the cooking pot initially to minimize air-conditioning time. After that, the curve amounts off as the customer acuity reaches the competence of the product.
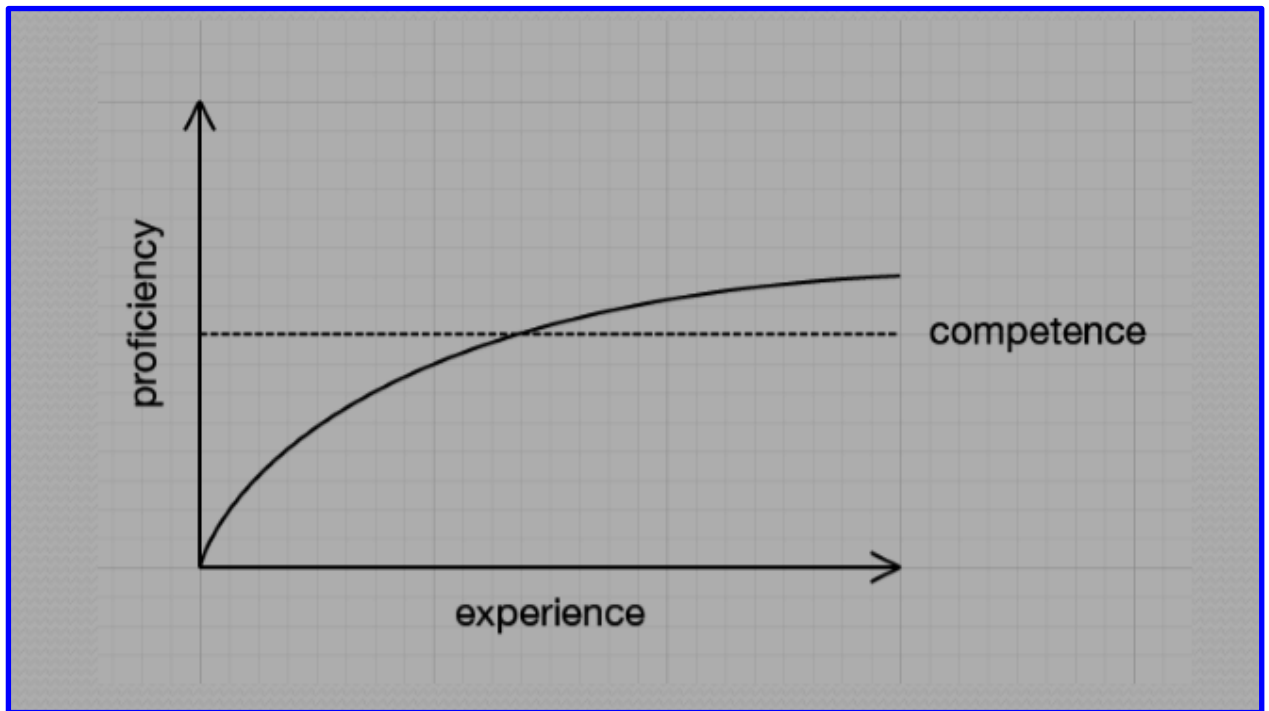
Figure 5.8 Timing and Learning Carve

5.9 Supporting People with Disabilities

Making the world wide web a lot more reachable for customers with various impairments is usually to an incredible level an issue using HTML the actual way it was planned: to encode meaning as opposed to the visual appeal

So long as a web page is coded for meaning, it is easy for choice browsers to provide that significance in such a way that is optimized for the skills of personal customers and thus facilitates the use of the net by handicapped customers.

Figure 5.9 People with Disabilities

CHAPTER 6

PLANNING AHEAD

6.1 Planning Ahead

Organizing is bringing the near future in the present
to enable to take action reading this right now

Figure 6.1 Plan Ahead

Why Planning Ahead Matters?

- Assessing Risk and Opportunities
- Becoming Proactive
- Improving Performance
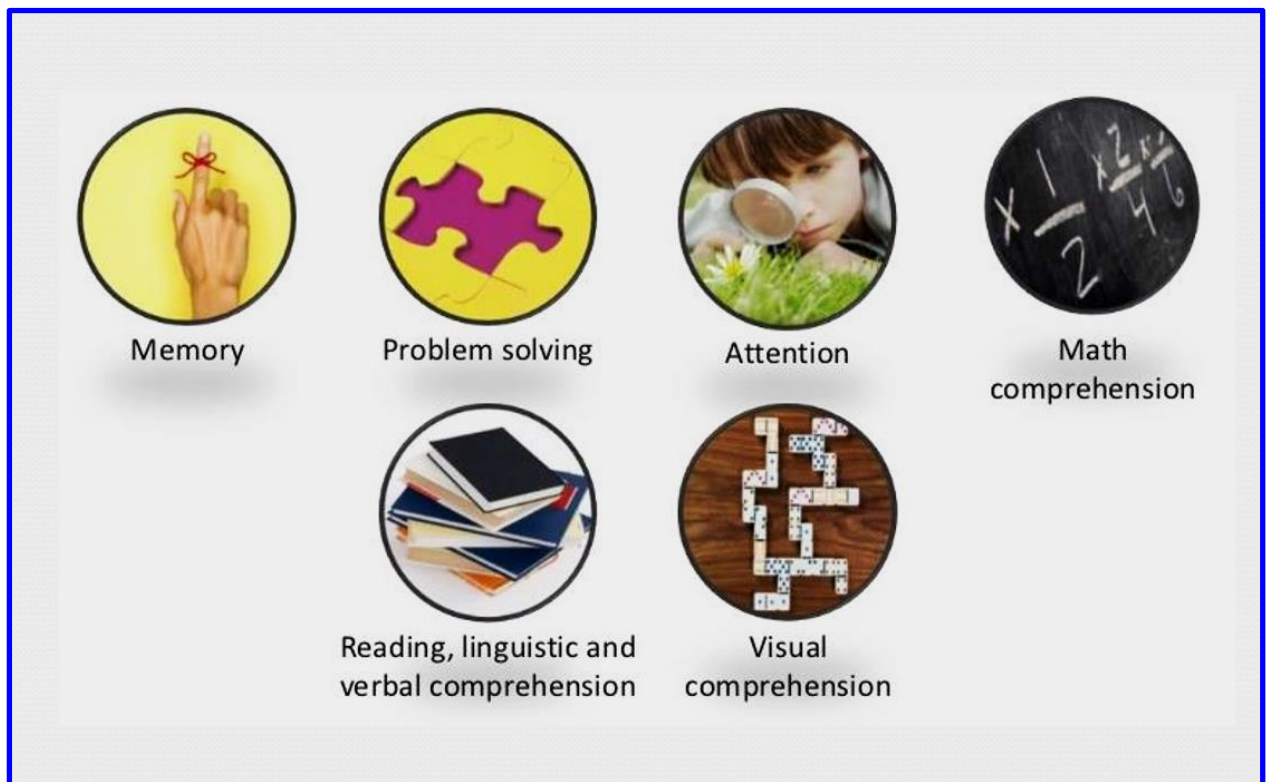- Enough Time to Develop Teams
- Tome for Revising and Updating the Plan
- Satisfying

6.2 Recognizing User-Friendly Elements

It does not make a difference in the case of having a great article for a website/app/program if the user cannot determine what they are looking for. Receiving 4 strategies for developing user-pleasant.

1. Concise "Scannable" Content:
A short paragraph, breaking up details on top of header/graphics straight forward dialects

2. Speed:
Stay away from extra-large photos, use Google's site speed information resource for a check.

3. Good Design:
Contrasting colors, utilization of spaces, clear fonts

4. Local Navigation:
Consisting of all major pages, a company with the sitemap involves lookup bars, contrasting colors, consumption of spots, magnificent typefaces.

6.3 Building a Flow Chart

In UX style a flow chart is used to visually stand for end user passes or user activities. More specifically, a flowchart is actually a diagram of any process employing the same regular signs and linking and linking outline.
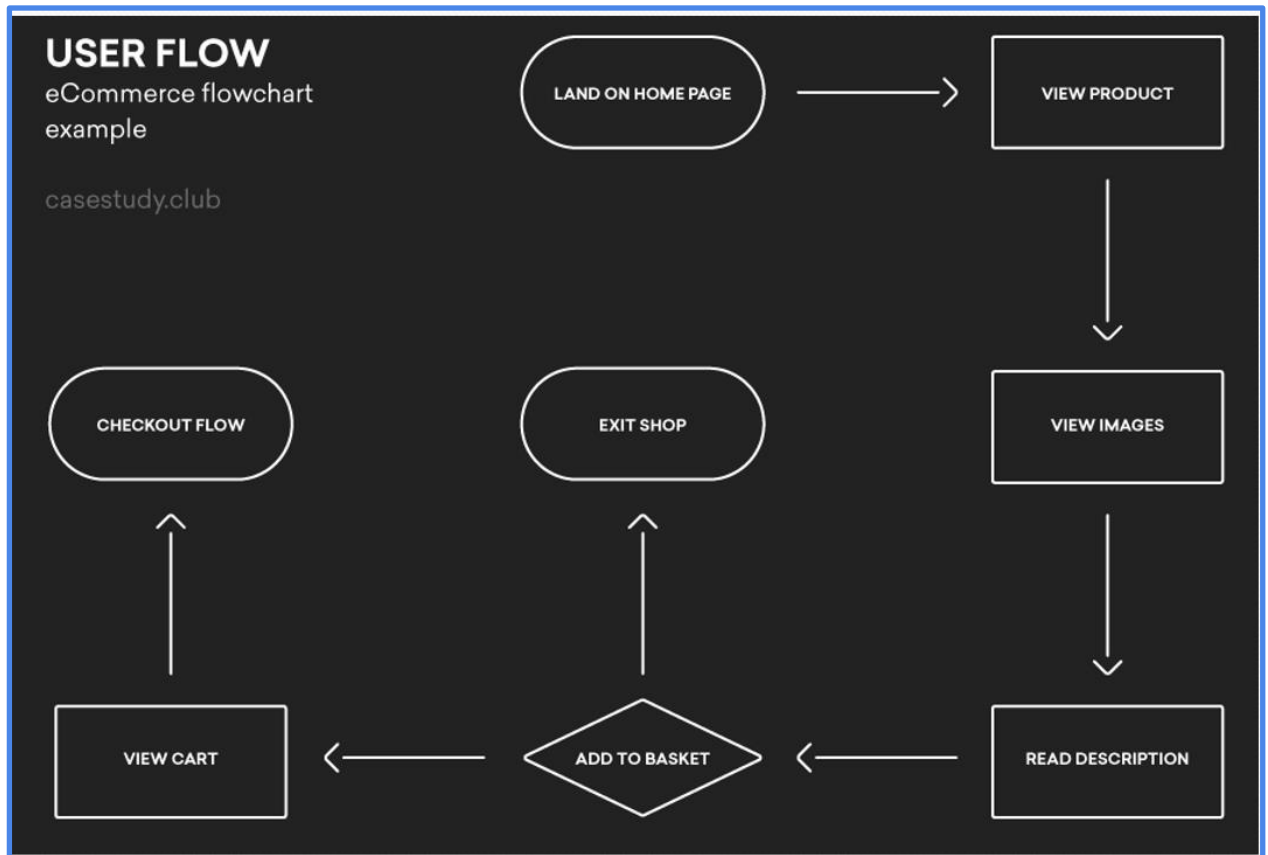

Figure 6.2 Flow Chart Diagram

6.4 Flowchart Symbols and Meaning

Start/End (Oval)

The oblong represents the beginning or even the result in a flowchart.

Process (Rectangle)

The rectangle signifies methods at the same time. This really is a go- to symbol in every flowchart and quite possibly the most frequently used. the oblong denote first step or even the lead to a flowchart

Input/Output (Parallelogram)

The parallelogram represents enter/output.

Decision (Diamond)

The precious stone represents decisions. this may typically divide the flowchart employing arrows.

Arrow (Direction)

The arrow mark is used to stand for a circulation path. this will be, in addition to the rectangle, to go to icon

Flow Chart

User Flow:

An individual stream allows us to get a much better idea of the step a person will take using a whole service, application or possibly a website.
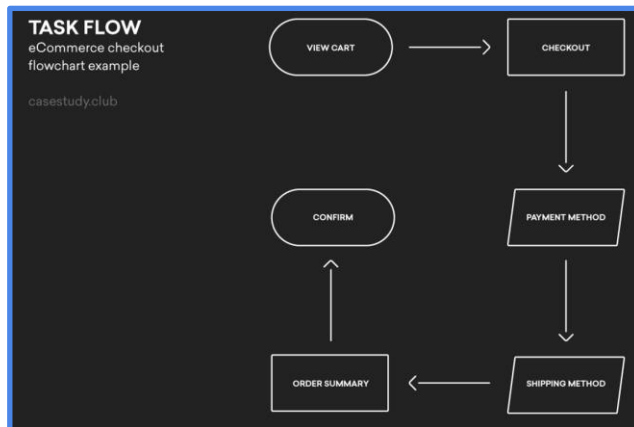
Task Flow
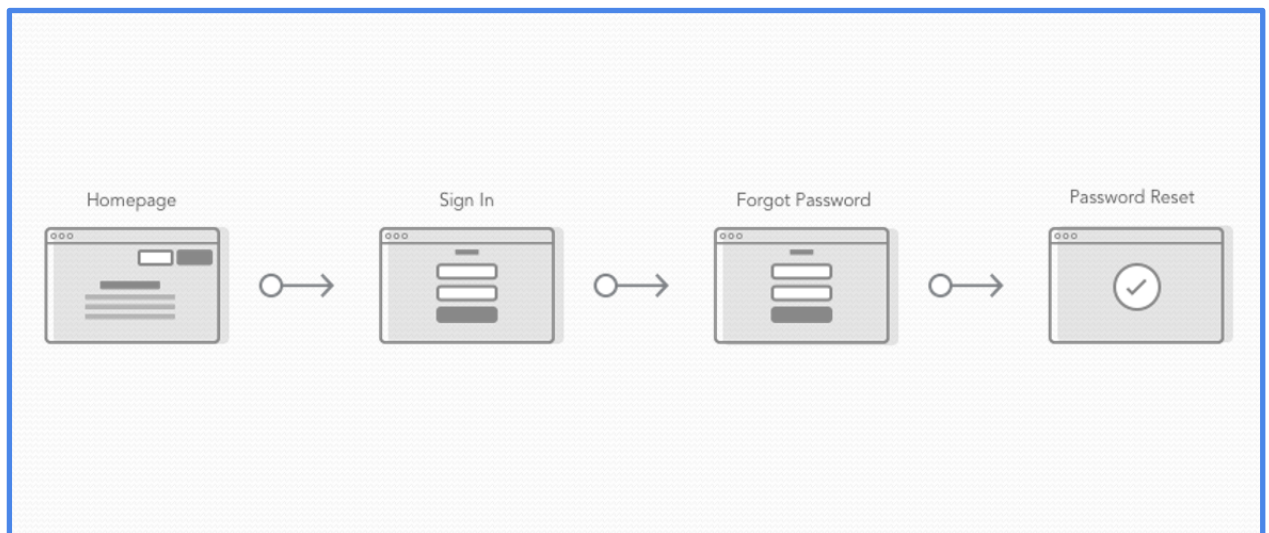

Fig Ch 6.3Task Flow Diagram
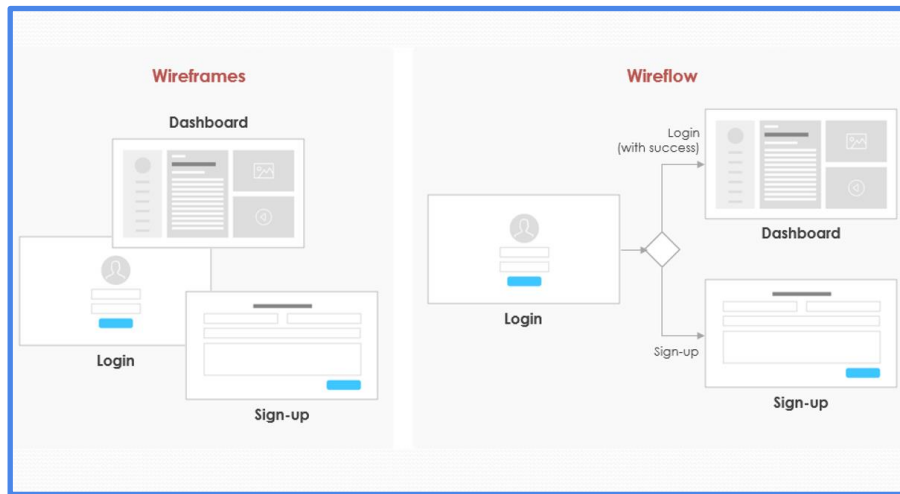

Fig 6.4 Step to Task

6.5 Wireframe and Wire flow

Fig 6.5 Wireframe and Wire flow

CHAPTER 7

FUTURE OPPORTUNITIES & CONCLUSION

7.1 Conclusion of Internship

Bangladesh is a digital country. Information and communication technology have already been identified by environment executives as a vital expansion enabler in a community summit on detailed culture in Geneva in 2003 and after that in Ruins ins in 2005. Within the poverty lowering method of the nation known as national strategy for father poverty decrease 2009, ICTs had been similarly recognized and presented with cheers value. The particular governments electronic Bangladesh by 2021 sight shows to well-knows ICTs such as pro-lousy source of information to do away with poverty, set up wonderful governance, make sure social security though high quality education on learning, wellbeing-connected, and law enforcement for all those, and come up with the folks for climate change.

For computer science students' practical knowledge is essential but sensible understanding provides much more self-confidence. "TweeTech" is playing an important role in Bangladesh's development. I'm thankful to them for giving me a chance to work with them. Now I'm implementing the knowledge which I got from my internship.

In the future I want to start my own design and development agency in Bangladesh.

7.2 Future Opportunity for Career

UI design is an extremely great profession, supplying enough opportunities along with a competitive wage. Actually, a large amount of good stuff about a profession such as UI stylish internet sites, apps and applications are readily available now, So UI designers have an authentic effect on the look and really fell off the electronic place.

UX Design is also a superb career. Due to UX Designer's engagement at so many phases of any project's existence routine, UX innovative designers are probably the most in- call for jobs in technological innovation, with 87% of deciding on admitters declaring that buying UX builders is definitely a top priority.

APPENDIX

Introduction

Internships are valuable for developing professional life, enhance personalized personality, and supply an increased chance. For the purpose of internship, I will allow myself the broadest array options when I am looking for and obtaining work after university.

Learn from Entire Internship

I learning the things i discuss below when practicing in "TweeTech"

Discipline

Within my internship, I purchased personal-discipline which is important. I figured out how to be self-disciplined in the marketplace area. The easiest method to keep to the hours of work combined with the workplace and maintained I worked out from my work. It is vital that we have experienced self-control.

Teamwork

Teamwork is undefined essential in resolving problems. When effort is divided up among the number of team members of a team, it gets accomplished more quickly, making the overall work more effective. Teams develop a feeling of comradery when operating toward a common objective. Teamwork develops morel. It feels work respected on playing a role, something that creates good results.

Understanding Responsibilities

Responsibility, in the vibrant of teamwork, it is essential that celebration concerned both understand the operate they are responsible for and make effort to perform stated activities perform stated activities promptly or higher for the expected standard.

Being Professional

To have much better guidance, elegance ought to be offline and it is difficult to acquire efficiency at the office without an expert and appropriate way of thinking. which was totally described by the seniors.

APPENDIX A

TweeTech web design company is located in Dhaka, Bangladesh. They have full service on website design and development with a strong focus on creative design. For over 6 years they have been creating high performance websites, software and apps that give the latest digital experience for e-commerce service and financial services, insurance companies, IT companies, schools, college, nonprofits, and government agencies. They understand that creating user-friendly experiences based on UX best practice, market investigation and user testing is the best. TweeTech provides the very best and personalized solutions for business. TweeTech professional class supply assists the customer's setting to use in the optimum level.
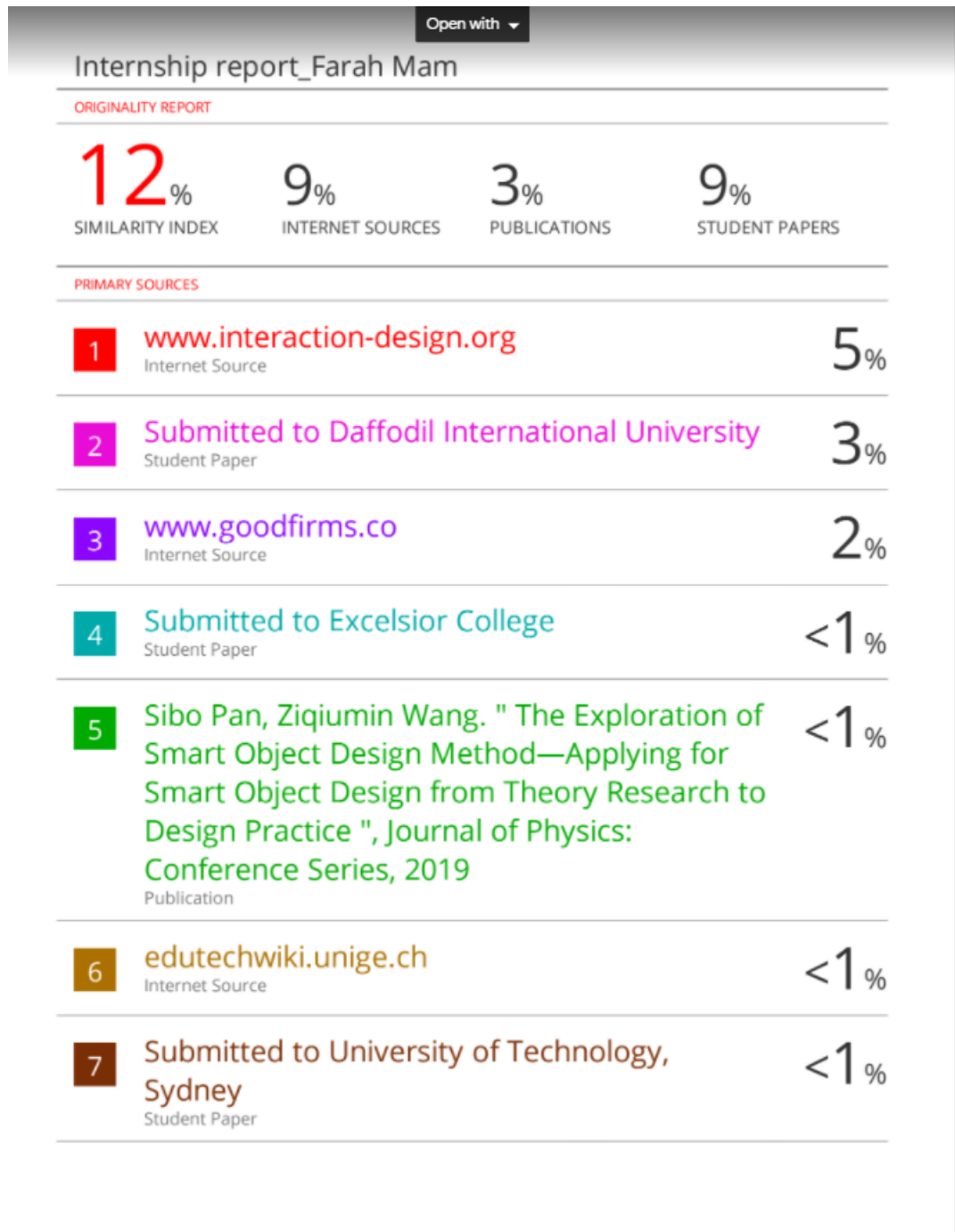
COMPANY ADDRESS

TweeTeach
Tropical Alauddin Tower And Shopping Complex Uttara, Dhaka - 1230, Bangladesh
Email: info@tweetech.agency
Phone: 01610676744

REFERENCE

[1] Available at url://www.google.com, Last Visited September 01,2021 12.00 pm

[2] Available at url://www.uxstudioteam.com, Last Visited September 01,2021 11.00 pm

Open with ▾

Internship report_Farah Mam

ORIGINALITY REPORT

12%	9%	3%	9%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.interaction-design.org Internet Source	5%
2	Submitted to Daffodil International University Student Paper	3%
3	www.goodfirms.co Internet Source	2%
4	Submitted to Excelsior College Student Paper	<1%
5	Sibo Pan, Ziqiumin Wang. " The Exploration of Smart Object Design Method—Applying for Smart Object Design from Theory Research to Design Practice ", Journal of Physics: Conference Series, 2019 Publication	<1%
6	edutechwiki.unige.ch Internet Source	<1%
7	Submitted to University of Technology, Sydney Student Paper	<1%

©Daffodil International University

©Daffodil International University