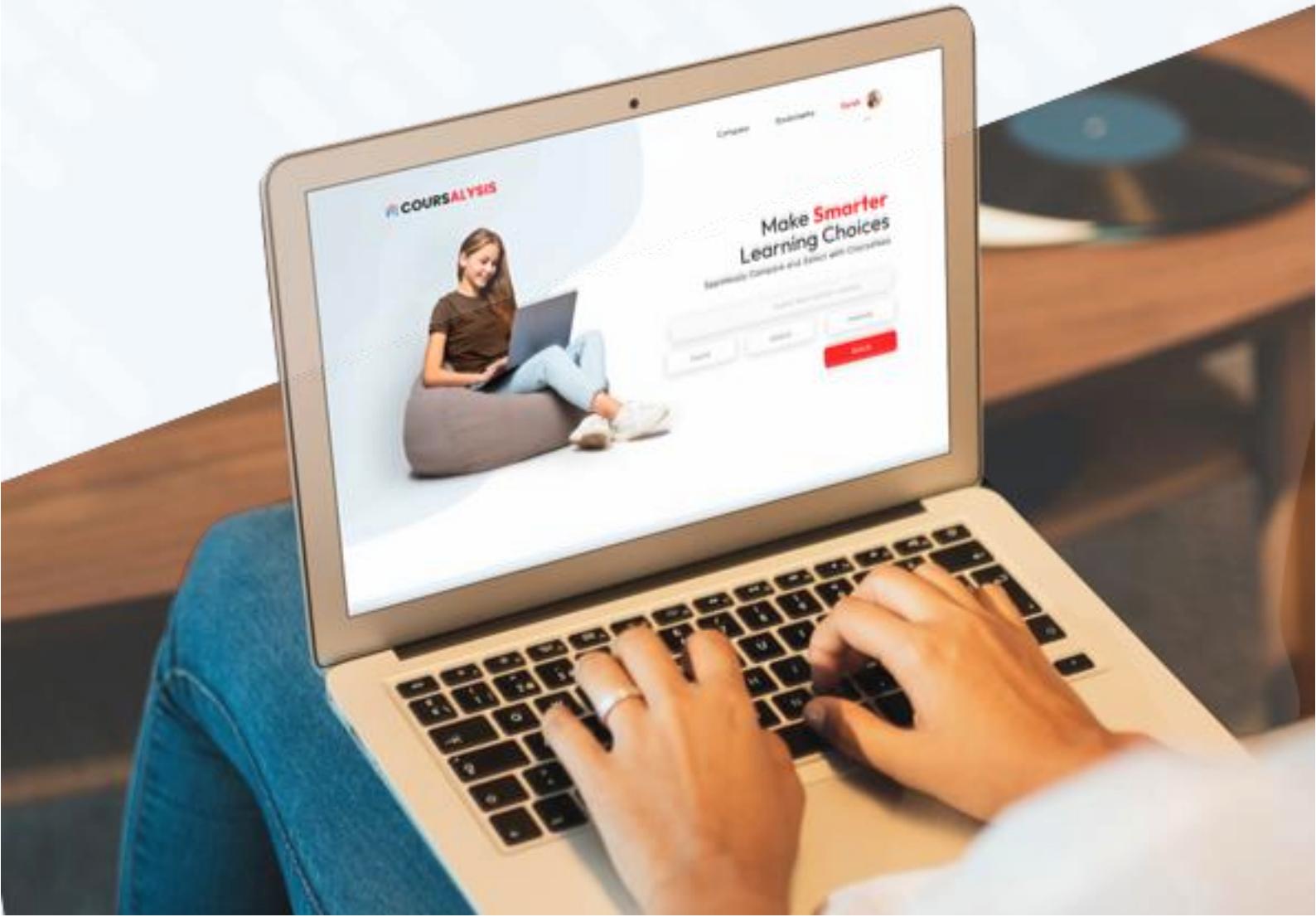


Simplifying MOOC Course Selection With



**Major Project (IDM90)**

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## Contents

Acknowledgement .....	3
Abstract .....	4
Introduction .....	4
Background.....	4
Objective .....	5
Problem statement.....	5
Methodology .....	5
Project Management.....	6
Target audience .....	7
Initial assumptions .....	7
Empathise .....	8
Literature review .....	8
Competitor analysis.....	14
Surveys and interviews.....	16
Survey .....	17
One-on-one Interview .....	19
Task observations .....	20
Define .....	23
Problem statement.....	23
Affinity Diagrams .....	24
Pain Points .....	26
Personas .....	27
Empathy Maps.....	29
Customer Journey Maps.....	31
POV statements.....	32
How Might We.....	33
Ideate .....	35
Brainstorming .....	35
Idea finalisation .....	36
Research .....	38
Technical aspects .....	38
Business aspect .....	39

Reward system .....	39
Typography .....	40
Colour .....	41
Iconography.....	41
Logo design.....	42
Pattern .....	42
User flow .....	43
Prototype .....	44
Low Fidelity (Low-Fi):.....	44
Medium Fidelity (Mid-Fi):.....	45
High Fidelity (Hi-Fi) .....	46
Visual Design key screens.....	50
Testing .....	58
Chosen evaluation techniques.....	60
Formative Test and Evaluation .....	60
Formative Data analysis and participants.....	61
Formative Recommendations.....	62
Overall Recommendations: .....	63
Summative Test and Evaluation .....	63
Final recommendations .....	65
Visual Design.....	65
Future recommendations.....	66
Personal reflection .....	67
References.....	69
Appendix .....	75

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I'd like to thank the faculty members of the University of Brighton UX Design programme for their dedication to providing an interesting educational experience. The different viewpoints and challenging curriculum have substantially changed my understanding of UX Design, allowing me to grow as a designer as well as a thinker.

I would like to express my gratitude to my friends and family for their continuous support, patience, and understanding. Your faith in me has been my driving force, and your support has kept me going during difficult times.

In conclusion, the dissertation's climax signifies the end of one chapter and the beginning of another. The experience has been transformative, and I am eager to put my newfound knowledge and talents to use as I enter the realm of UX Design. Thank you to everyone who has contributed to my development and success. Your encouragement will live on in my heart forever.

Sincerely,

Shailaja Prasad

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## Abstract

This dissertation examines the difficulties potential learner face when searching for MOOCs (Massive Open Online Courses) websites, with a particular emphasis on the problem of choice overload. To address the multiple difficulties that they encounter in this environment, the study takes a holistic approach centred in the design thinking process. It tries to not only highlight the challenges but also provide a new solution by applying empathy, define, ideation, prototyping, and testing approach. The ultimate goal is to improve the user experience of potential learner facing the problem of choice overload.

## Introduction

### Background

The extensive use of information technology has significantly altered our way of life and employment. It has impacted how we interact with others, process information, and communicate. The evolution of electronic innovations from email to e-commerce to e-government to the current field of e-education highlights a wonderful journey. Each of these phases represents a significant advancement in the way we use technology to modify different facets of our life (Kumar et al., 2017).

The most recent example of this electronic evolution is seen in the field of e-education, which has altered ways of teaching (Kumar et al., 2017). Online learning environments provide flexibility and involvement, extending education beyond conventional boundaries and facilitating opportunities for lifelong learning. This stage emphasises how technological advancements have completely changed the educational scene.

### The Progressing Global Trend of Online Education

Over the last ten years, online education has risen enormously. The rising availability of the internet and the World Wide Web has generated a variety of opportunities for non-traditional education via this medium (Li and Beverly 2008). The disruptive effect of the COVID-19 pandemic intensified this trend. With the outbreak of the pandemic, a dramatic shift happened, driving billions of students and an increasing number of educators to migrate from traditional face-to-face instruction to the realm of online education.

### Online Learning and MOOCs

Over the years, there has been a significant increase in the acceptance of online learning, which has resulted in the development of an innovative online education model known as MOOCs (massive open online courses). MOOCs are extensive web-based courses created and offered by certified higher education institutions and organisations that are accessible to anybody with a smart device and internet access, regardless of age, gender, geographical

location, or educational history (Deng, Benckendorff and Gannaway, 2019). While the content and learning activities are free, some MOOCs may charge a nominal price to offer a 'completion certificate' (Deng, Benckendorff and Gannaway, 2019).

E- education has various advantages over traditional education, including time and cost savings, improved engagement, and better flexibility. However, successful online learning is dependent on a variety of aspects such as technological characteristics, user-friendly virtual platforms, interactive class interactions, and effective evaluation systems (Toan, Dang and Hong, 2021).

The process of identifying and selecting an optimum e-learning platform that stands out in delivering effective online education has grown increasingly challenging in the context of the constantly growing environment of online education. This complexity arises from the large number of evaluation factors that must be carefully addressed during the decision-making process. The problem of selecting and prioritising these websites can be framed as a difficult multi-criteria decision-making (MCDM) issue (Toan, Dang and Hong, 2021).

## **Objective**

This study aims to explore the difficulties individuals face in selecting an online course from the vast array of available MOOCs. The main goal is to gain insights into these during decision-making. By examining the factors that influence their choices, the aim is to develop a streamlined solution for easier and more effective course selection from the abundance of options presented by MOOCs.

## **Problem statement**

It was critical to accurately formulate the problem statement in order to gain a better understanding of the situation. The problem statement for this research is as follows.

*"Providing potential learners with a more effective means of selecting MOOCs for online learning could result in better educational performance with a deeper, more holistic learning experience."*

## **Methodology**

In order to gain a deeper understanding of users and formulate an effective solution, the design thinking process was undertaken. Design thinking is a dynamic and iterative strategy utilized to grasp consumers' perspectives, challenge assumptions, reframe issues, and create

innovative solutions for testing and refinement. Design Thinking (DT) plays a pivotal role in the contemporary business landscape, being acclaimed for its capacity to drive innovation (Waidelich et al., 2018).

Design Thinking has developed as a revolutionary cognitive framework that promotes evolution and innovation in the current business world. Empathise, Define, Ideate, Prototype, and Test are the five separate processes that comprise the framework. These stages work together to build an immersive understanding of user experiences, improve problem descriptions, generate creative ideas, materialise tangible prototypes, and validate solutions through iterative testing techniques. This methodological approach allows for a thorough examination of user needs and pain points, resulting in the creation of user-centric solutions. (Yu Siang, 2009) (ResearchGate, n.d.).

Several convincing considerations led to the decision to use design thinking as the guiding framework for this project:

**User-Centricity:** Design thinking has a very user-centric approach. In the field of MOOC selection, where learners come from a variety of backgrounds, tastes, and learning styles, it is important to use a method that fully knows their individual requirements. This method assures that the answer satisfies their expectations.

**Adaptive Iteration:** The iterative nature of design thinking fits in perfectly with the constantly evolving landscape of MOOCs. This method promotes ongoing refining, allowing for the incorporation of new insights and the adaption of solutions in response to summative Testing.

**Practical Validation:** The design thinking prototype and testing phases provide a real way to validate proposed ideas. It ensures that the solution is feasible and helpful for learners in real-world situations.

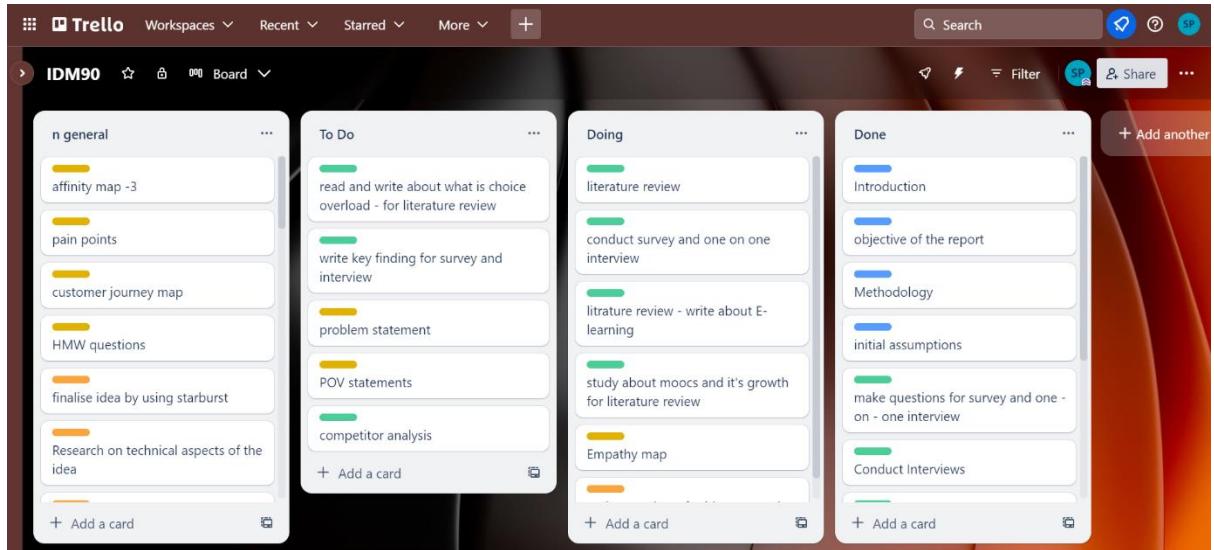
## Project Management

Throughout the project's duration, a Trello board was used to keep a disciplined and organised workflow. This tool was really useful in measuring weekly progress and creating goals. It functioned as a digital canvas where ideas were written down, task status was tracked, and everything stayed on track. (Trello board screenshots can be found in appendix)

The first work completed on Trello was to catalogue all of the essential assessment briefs, which were nicely organised in the 'in general tab'. This fundamental phase efficiently aligned goals with the project timeframe.

The empathise and testing phases took up a major chunk of the project's schedule. These stages were critical in acquiring a thorough grasp of the user's point of view, generating useful recommendations, and finally assuring a positive outcome.

Although there were times when the project's demands conflicted with other simultaneous duties. This scenario occasionally caused considerable delays, which were notably obvious in August. Nonetheless, with perseverance and effort, the goals were achieved.



*Figure I: Trello board screenshot.*

## Target audience

The potential audience includes a wide range of learners seeking online courses at the high school, undergraduate, graduate, and postgraduate levels. This also includes those who are not constrained to formal schooling but are keen to engage in online learning experiences.

## Initial assumptions

Prior to the start of the empathise phase, a set of basic assumptions was formed in the capacity of a member of the target audience and written down:

- It is expected that the number of options on MOOC websites will result in fatigue from decision-making, decreased motivation, and maybe a less favourable learning experience for students.
- Due to the vast volume of options accessible, students may have difficulty evaluating the quality and authenticity of courses on MOOC websites.
- Students approach MOOCs with different learning goals, and it is thought that the existing design of MOOC websites may not properly adapt to the several aims of different learners.
- It is expected that students would benefit from better guidance and recommendations during the course selection process, allowing them to better match their selections with their personal and professional goals.

## Empathise

Empathise is an important step in the design thinking process, which is a problem-solving method that focuses on understanding and meeting the requirements of users or consumers, typically through user research (Yu Siang, 2009). The goal of the Empathise phase is to obtain a thorough knowledge of the experiences, feelings, viewpoints, and requirements of the people for whom you are developing (Wolniak, 2017). Putting oneself in their shoes, actively listening, and gaining ideas to assist the development of effective solutions are all part of this step.

The primary goal of this stage of the design thinking process was to comprehend the complexities of the challenges and their related requirements. The first step was to perform a thorough investigation into the nature of e-learning and the function of Massive Open Online Courses (MOOCs). This detailed investigation was conducted with the goal of diving deeply into the core of the issue and developing a thorough understanding of its intricacies. Surveys and one-on-one interviews were conducted to get information from personal experiences of potential learners as well.

## Literature review

### The concept and definition of e-learning

In today's world of constant advancements in technology and increased communication, the practical benefits of online education have seen a tremendous increase in terms of technological skills, cost-effectiveness, and operational efficiency. Due to cost constraints as well as the encouraging potential for significant profits, universities are increasingly motivated to offer online programmes.

The definition of "e-learning" has sparked much debate. The ways researchers define it show what issues they specialise in. E-learning covers a wide range of uses, learning methods, and processes. In 2001, the European Commission defined e-learning as "the use of new multimedia technologies and the internet to improve learning." This includes making it easy to access resources and services, as well as collaborate even when people are geographically separated (Arkorful, 2014).

### Growth of online education

The emergence of online courses in higher education wasn't an immediate occurrence. Since the 1990s, organisations such as the World Bank, UNESCO, and the European Commission have advocated for the use of online and remote education to increase educational opportunities for the underprivileged population ( Palvia et al., 2018). In the autumn of 2006, about 20% of higher education students in the United States were enrolled in at least one online course (Allen and Seaman, 2007). According to projections, India will have the world's

largest population by 2030, a trend that will be mirrored in the higher education industry (Sun and Chen, 2016).

Furthermore, countries such as China, South Korea, Malaysia, and South Africa are fast embracing online education, which is growing in popularity. A study undertaken by Dziuban, Picciano, Graham, and Moskal, mostly focusing on the United States, delineates the trajectory of online education's advancement through four distinct periods( Palvia et al., 2018). These stages are as follows:

The 1990s were defined by the incorporation of the Internet into distance education( Palvia et al., 2018).

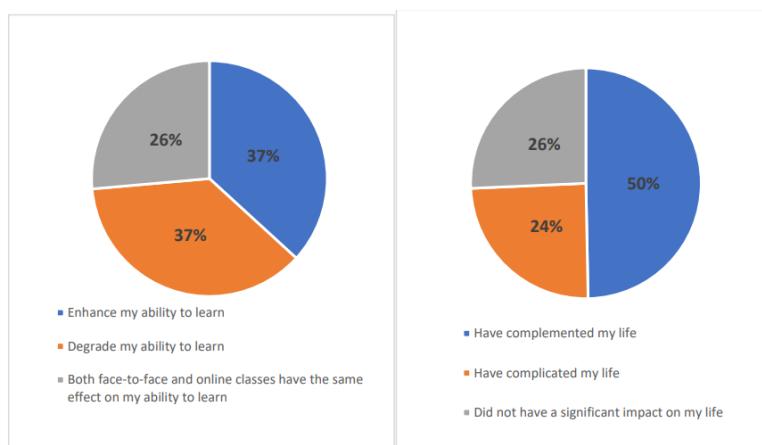
From 2000 to 2007, the rise of Learning Management Systems (LMS) was notable ( Palvia et al., 2018).

From 2008 to 2012, we saw the creation and spread of Massive Open Online Courses (MOOCs) ( Palvia et al., 2018).

Following era: When enrolments in online higher education have surpassed those in traditional higher education ( Palvia et al., 2018).

### Necessity of online learning during pandemic

In response to global lockdowns, online learning has emerged as an essential resource or maintaining educational system and avoiding disruptions. The traditional brick-and-mortar classroom model has given way to the transformative influence of online education, with the COVID-19 epidemic acting as a catalyst for this shift. Worldwide, educational institutions have developed a variety of techniques to promote continuous learning during these difficult times, emphasising the importance of embracing online learning choices (Muhaimin Muhaimin et al., 2023). *Figure 3* depicts the overall impact of online classes on student's daily routines and schedules during the Covid epidemic, based on a study conducted by Dan Li (Li, 2022).



*Figure 1.1: impact of online classes on student's life and ability to learn.*

While the pandemic posed significant obstacles in many areas, it also revealed a positive side for online education. In the midst of the current uncertainties, the online education sector has

emerged as an unexpected source of development. The pressing need for educational institutions to harness digital platforms and resources has resulted in an extraordinary boom in the incorporation of online education approaches. This transformation revealed the previously untapped potential of online education, demonstrating its ability to adapt and thrive in the face of difficulties. As per the report, the Global Online Education Market was said to reach US\$ 585.48 Billion by 2022.(2) and During the period 2021-2027, the global online education industry is predicted to develop at a double-digit CAGR of 13.8%. (3)

Massive Open Online Courses (MOOCs) have received significant attention in the midst of the COVID-19 pandemic for their ability to expand higher education opportunities and improve teaching and learning quality. As a result of the crisis, several initiatives have been launched to promote higher education and ease society's transition into the sphere of digital learning. These projects demonstrate the growing acknowledgment of MOOCs as a useful instrument for solving the pandemic's concerns and transforming the educational landscape (Alamri, 2022). The core of online learning, which relies on the internet to varying extents, necessitates a level of technological proficiency on the part of both educators and learners. (Paudel, 2021). Notably, a QS Top Universities Ranking continuing study finds that nearly half of the surveyed universities have moved specific courses online, with this trend anticipated to continue (Li, 2022).

Scholars such as Pape, argue that online learning has the potential to improve student learning outcomes, particularly in the face of resource restrictions in higher education. The online world provides a massive library of knowledge and authentic materials encompassing a wide range of domains (Paudel, 2021). Moore and Kearsley investigated the issue "Why is online learning necessary?" and provide strong reasons:

- Providing equitable access to learning opportunities for all.
- Allowing for rapid improvements in job-related skills.
- Making educational resources more cost-effective.
- Improving the present educational structures' quality.
- Increasing the educational system's capacity.
- Bridging inequalities between age groups.
- Educational efforts that engage certain target audiences.
- During an emergency, providing speedy education in important areas.
- Expanding educational offerings into previously uncharted domains.
- Creating a balance between school, career, and family duties.
- Adding a global perspective to the educational path (Li, 2022).

The expanding importance of online learning derives from its ability to break down barriers, adapt to changing needs, and enrich the global educational scene. This change marks an important turning point in the growth of education, allowing for greater access, flexibility, and creativity.

## Moocs

Massive Open Online Courses (MOOCs) have emerged as an effective tool with the ability to bridge societal and financial divides by opening up access to top-tier education and, as a result, address the growing discrepancy in educational opportunities (Ma, Sharif and Khong, 2022). MOOCs, which function as digital learning environments, enable students from varied backgrounds to enrol in a variety of disciplines while minimising barriers and costs (Alamri, 2022). Billington and Fronmueller (2013) proposed in 2013 that certain experts saw MOOCs as a flimsy bubble about to collapse. However, reality defied these projections, with 180 million students enrolling in a total of 16,300 courses offered by more than 950 global universities by the end of 2020 (Shah, 2021). This undeniable increase in participation demonstrated that MOOCs continued to capture the interest of numerous institutions and the worldwide public, extending the momentum established since the hailed "year of the MOOC" in 2012 (Comer, Clark and Canelas, 2014). According to research, around 40% of MOOC learners are under the age of 30, with less than 10% exceeding the age of 60 (Christensen et al., 2013).

## Background study of MOOCs

The global landscape has seen a surge in the number of registered MOOC users and the variety of courses provided by these platforms. MOOCs are typically hosted on third-party online platforms, but they can also be developed independently by educators (Comer, Clark and Canelas, 2014). In order to make higher education more accessible to a wider range of people, the concept of the Massive Open Online Course (MOOC) model was created in 2008. This concept includes university-affiliated as well as corporate-driven online educational options.

Among the university-led initiatives, major players include edX, founded in 2012 by Harvard University and the Massachusetts Institute of Technology (MIT), and eduMOOC, founded in 2011 by the University of Illinois Springfield. In addition, Coursera, a collaboration with major institutions such as Princeton, Stanford, UC Berkeley, the University of Michigan-Ann Arbor, and the University of Pennsylvania, launched in 2012. One admirable aspect of these projects is that they are frequently open to the public, making education available to anybody regardless of financial means.

Individuals' motivations for enrolling in MOOC platforms vary; many are driven by a desire for in-depth education in their fields of interest, and many also hope to obtain qualifications that will help them land jobs. Some professors even advise their pupils to use MOOCs to enrich, reinforce, or supplement their standard classroom education. While enrolling in MOOC courses is normally free, obtaining certification and participating in course tests do have fees (Comer, Clark and Canelas, 2014).

Table 1 summarises some well-known online education initiatives (Sun and Chen, 2016).

Name	Sponsor	Year founded	Fees
<b>Coursera</b>	Joint efforts by Princeton University, Stanford University, University of California Berkeley, University of Michigan-Ann Arbor, & University of Pennsylvania	2011	Private
<b>eduMOOC</b>	University of Illinois Springfield	2011	Free
<b>edX</b>	Harvard University & MIT	2012	Non-profit
<b>iTunes U</b>	Apple Corporation	2012	For-profit
<b>Khan Academy</b>	Salman Khan (Hedge Fund manager)	2007	Non-profit
<b>Minerva</b>	Minerva project and Keck Graduate Institute (KIG). (Larry Summers, former Harvard University President & United States Secretary of the Treasury, chaired its first advisory board)	2012	Private
<b>MITx</b>	Joint efforts by Harvard University and edX	2001	Non-profit
<b>Peer 2 Peer University (P2PU)</b>	Funding from the Hewlett Foundation & the Shuttleworth Foundation,	2009	Non-profit
<b>Saylor</b>	Michael J. Saylor (Chairman, CEO, & President of the business intelligence company MicroStrategy)	2008	Non-profit
<b>TED-Ed</b>	Sapling Foundation	1984	Private Non-profit
<b>Udacity</b>	Sebastian Thrun	2012	For-profit
<b>Udemy</b>	Eren Bali	About 2010	Some are free; some are for a tuition fee
<b>University of the People</b>	Shai Reshef (educational entrepreneur)	2009	Non-profit

Figure 1.2: shows some of the famous MOOCs websites and when it was founded.

### Factor's affecting decision-making of MOOCs

When choosing a course, students evaluate a number of important factors. These include the course's repute, recognition, the level of involvement it provides, and the degree of affordability it provides (Tomei, Perrin and Perrin, 2004). These influences impact their judgement and influence the decisions individuals make in pursuit of their educational goals. The course's reputation reflects its position in the academic community and perceived excellence, whereas certification ensures its legitimacy and conformance with recognised criteria. Interactivity, on the other hand, refers to the course's level of involvement and participation, which fosters a dynamic learning experience. Finally, affordability is critical, as students assess their financial capabilities against the possible benefits of the course.

Although accessibility influences the desire of learners for online education, a variety of other factors have a substantial impact on their decisions. Tallent-Runnels et al. (2006) define them as the quality of course design, the facilitation of interactive engagement, and the

effectiveness of the evaluation system. Notably, Tallent-Runnels and colleagues (2006) give a thorough framework outlining critical aspects required for online education success. This includes the characteristics of students, the course delivery method, specialised tools for instruction, and the vital role of teachers. Universities are encouraged to engage in training for both staff and students, provide strong technological support, and commit dedicated time for faculty to develop online courses to ensure the success of online education (Sun and Chen, 2016).

### **Choice or information Overload**

The digital landscape frequently places consumers in situations where they are confronted with several options, resulting in a condition known as "choice overload." The incorporation of e-learning has introduced an unexpected challenge: the possibility of overwhelming choices and increased traffic congestion on specific websites. This behaviour, in turn, might result in unexpected expenses, affecting both time and financial resources(Arkorful, 2014).

Furthermore, the abundance of online courses, many of which have excellent ratings, contributes to learners getting lost as a result of information overload. This frequently leads to difficulty in determining the best course, a process that might take several days. This difficulty in course selection is linked to high dropout rates, as learners may not be recognising the courses that best match their tastes (Comer, Clark and Canelas, 2014). According to a poll done by Gütl et al., 14.93% of students are dissatisfied with the lack of personalisation in the learning environment (Gomez et al., 2022).

Aside from these patterns, students face additional challenges as they navigate their course options. While online review systems are widespread in many businesses, the MOOC ecosystem lacks a standardised or completely decentralised evaluation procedure. While some MOOC providers use the traditional 5-star rating methodology in conjunction with open-ended reviews (Gomez et al., 2022), the limitations imposed by many of these review systems limit the voice of many students, hampered the dissemination of relevant insights critical for informed MOOC selection. Transparency within these review systems could usher in fresh techniques to assisting students in comparing different courses. A lack of consistency in review processes, combined with high search prices and low completion rates, adds to poor user experiences across numerous MOOC providers (Gomez et al., 2022).

### **Conclusion**

Learners face an extensive number of obstacles as a result of the flood of learning resources and information. Relevant problems arise, such as how to find the best provider for a certain MOOC, who is the best choice, and whether the existing MOOC reviews can be trusted (Gomez et al., 2022). Some prevalent issues were noted amongst the users of online learning platform such as people getting lost because of information overload and lack of good rating system in already existing MOOC websites. To overcome this issue, it was important to focus on the

factors that influence their decisions which were reputation, accreditation, interactivity and affordability.

As a part of the target audience and a user experience designer addressing this issue is critical, needing a creative solution aimed at reducing the choice overload encountered by prospective learners.

## Competitor analysis

A comprehensive approach to addressing the challenge of choice overload and developing an effective solution involves conducting a competitor analysis to obtain insights from existing platforms. A SWOT analysis was used to evaluate their strengths and weaknesses, of some of the famous MOOCs websites and to see if they tackle choice overload.

### Coursera

Coursera is a well-known platform in the online education industry. It works with leading colleges and organisations around the world to provide a diverse choice of courses. Learners can select from a variety of disciplines and earn certificates upon completion of the course (Coursera, 2023).

#### Strengths:

- Coursera provides a diverse range of courses from well-known universities.
- Certificates are issued following course completion, which increases user motivation.
- It has a significant international presence.

#### Weaknesses:

- Features for directly comparing courses in terms of time, cost is not available.
- Complex pricing schemes can make user confused.

#### Opportunities:

- The addition of direct course comparison tools could improve the user experience.
- Collaborating with other platforms to provide full data.
- Collaborating with educators and creating a forum to provide more thorough and in-depth courses could help the platform stand out.

#### Threats:

- Emerging platforms that focus on extensive research of specific subjects may attract learners looking for in-depth instruction.
- As online learning platforms are growing, there can be issues about the recognition of Coursera certificates in comparison to traditional degrees.

## EdX

edX is a well-known online learning platform that collaborates with universities, institutions, and organisations throughout the world to provide a wide range of courses and programmes. Founded by Harvard University and MIT, edX seeks to provide high-quality education to learners worldwide through massive open online courses (MOOCs) and micro-masters programmes. The platform emphasises a dedication to accessibility, affordability, and innovation in online education.

### Strengths:

- edX's certified certificates give learners with a sense of accomplishment and recognition.
- Many courses on the site are focused on professional development and career improvement.
- edX provides a mix of self-paced, instructor-led, and micro-learning courses to accommodate a variety of learning styles.

### Weaknesses:

- The cost of verified credentials may hinder some learners from getting the full benefits of the platform.
- Some students may find the structured method less flexible than completely self-paced platforms.

### Opportunities:

- Exploring various pricing structures or certification combinations may attract more learners to the site.
- A wider variety of learning formats, from micro-courses to in-depth programmes, might be tailored to different user interests.

### Threats:

- Platforms with lower-cost or free certification options might gain attention from people.

## MOOC List

"MOOC List" is a comprehensive aggregator that carefully curates a large database of Massive Open Online Courses (MOOCs) as well as complementary Free Online Courses from a wide range of providers. This platform provides learners with a centralised hub for exploring, discovering, and selecting courses from a variety of subjects, promoting a dynamic learning experience that caters to individual interests and educational objectives.

### Strengths:

- MOOC List provides learners with access to a diverse range of courses from multiple sources, allowing for exploration.
- CoUser-generated ratings and reviews help in making educated decisions.

#### Weaknesses:

- While MOOC List gives a comprehensive list, it may not go further into personalisation.
- The design of the website needs a revamp as it isn't very appealing compared to other websites.

#### Opportunities:

- Adding curated learning routes or collections to the site could increase its value by providing systematic skill development.
- The addition of direct course comparison tools could improve the user experience.

#### Threats:

- With new platforms and novel models entering the market, the online education sector is becoming increasingly competitive.

### **Key Findings**

After studying the SWOT analysis of Online learning platforms, it is clear that they distinguish themselves through features such as a wide range of options, various course offerings, and notable collaborations. They do, however, face obstacles such as restricted comparison tools, certification costs, and rising competition. The obvious reality is that the abundance of online possibilities, along with the lack of streamlined course comparisons and the have to navigating websites for evaluations, raises questions about feasibility.

### **Surveys and interviews**

An extended brainstorming session was carried out with the aim of developing a series of targeted questions in order to undertake a detailed study of the issues experienced by users of e-learning platforms. Furthermore, the emphasis was on discovering potential solutions to these problems. The research technique included conducting semi-structured interviews both online and in-person with a wide participant group ranging from professionals to students seeking bachelor's and master's degrees who are engaged in online learning. The interview procedure followed to qualitative research standards, ensuring thorough insights, and allowing for in-depth analysis.

Furthermore, a quantitative research approach was used, which included distributing of questionnaires to a diverse participant base. This method of quantitative analysis helped in the collection of statistical data, which was critical in identifying common concerns related with interactions on various Massive Open Online Course (MOOC) platforms. The deliberate

blending of qualitative and quantitative methodologies intended to obtain a deep understanding of the issues that individuals face when using e-learning platforms, while also identifying realistic solutions.

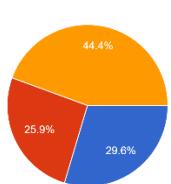
## Survey

A unique online survey was created that was targeted on students and professionals who have done e-learning course, to learn about their difficulties and acquire a through viewpoint, the objective was to get insightful information about their experiences. The survey was spread across social media platforms and via mail.

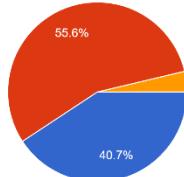
The survey questions were designed to gather broad insights, including difficulties encountered, selection explanation, suggestions for improvements, and demographic context. This comprehensive approach ensures that the survey captures an extensive overview of people's opinions and expectations, providing actionable insights that can be used to improve the online course selection process.

## Results of the survey

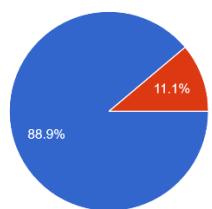
Please specify your highest level of education  
27 responses



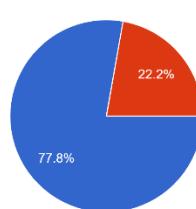
Current status:  
27 responses



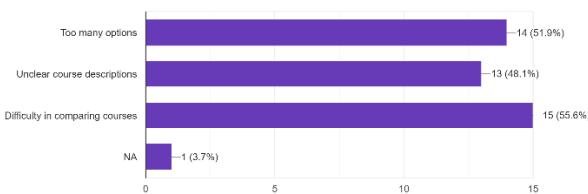
Have you ever taken an online course before?  
27 responses



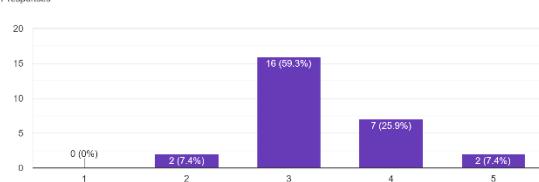
Have you encountered challenges while selecting an online course?  
27 responses

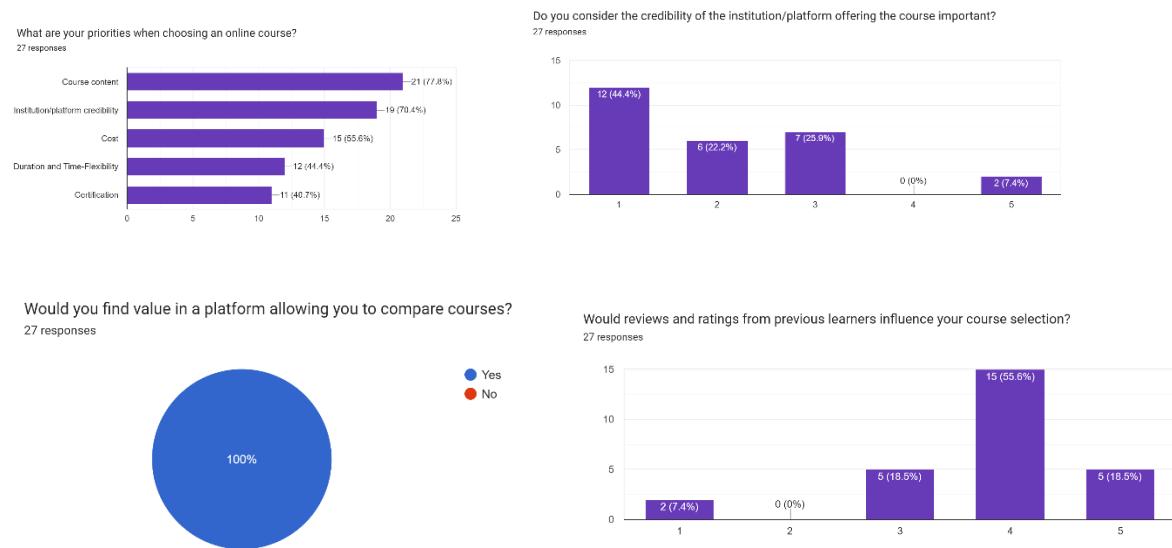


Which aspect of online course selection do you find most challenging?  
27 responses



How confident are you in navigating different online course platforms?  
27 responses





*Figure 1.3: Showcases the data collected from the online survey.*

The poll provided useful quantitative insights into people's preferences and concerns when looking for online courses. The survey produced a total of **27 responses**. Notably, the age distribution included a wide range of demographics: **11.1%** were under the age of 18, while **44.4%** were between the ages of 18-25, and 25-34. The majority of respondents held master's degrees and were high students.

An impressive **88.9%** of participants had previously taken online courses. **77.8%** of the total respondents had difficulty selecting these online courses. Among the difficulties listed, **55.6%** of respondents mentioned the difficulty in effectively comparing multiple courses as a key issue. A prevailing state of mind came up, showing that the majority of people's primary concern during course selection was the content itself. Notably, **70.4%** emphasised the importance of the institution that provided the course. Aside from that, issues such as cost, duration, and certification influenced their decision-making process. It is notable that **55.6%** of participants acknowledged the importance of peer reviews and ratings in their decision-making.

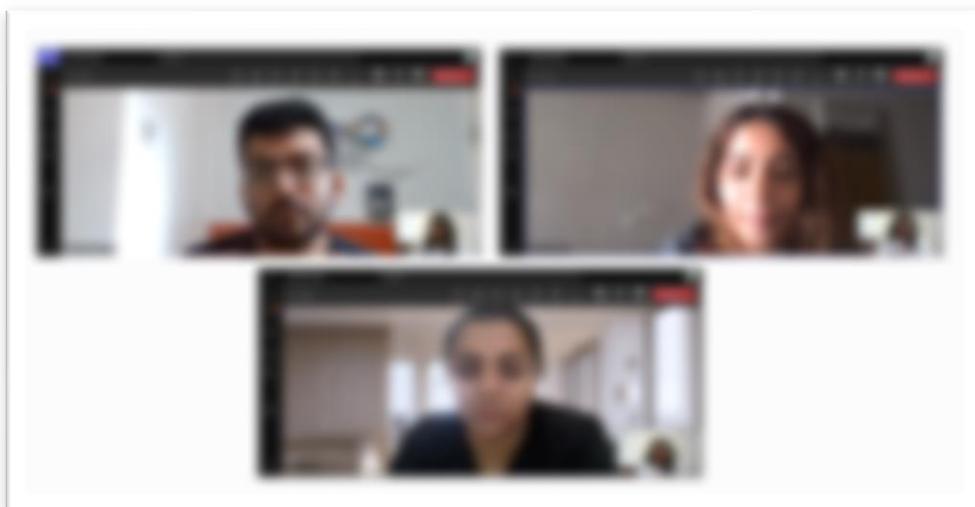
Participants were asked to identify particular obstacles encountered during course selection in the final phase of the survey. A persistent issue emerged, namely that participants regarded the current market's multitude of alternative platforms to be a barrier to decision-making. Navigating these platforms and properly comparing courses was a prevalent concern, with respondents stating that new user experience (UI/UX) and design intuitiveness may alleviate these issues. Furthermore, a few participants expressed a need for reviews from people who had already completed the course, which would provide significant insights to help their decision-making process.

## Key findings

The poll results highlight the complications involved in choosing online courses. The data shows a considerable emphasis on comparison of course content, as well as the importance of user ratings and ease of navigation. These findings lay a solid foundation for improving the online course selection experience by addressing platform variety and comparability challenges.

### One-on-one Interview

In order to develop a more thorough grasp of the requirements and preferences of potential learners, a one-on-one interview with two bachelor's, one master's student and two professionals was conducted. (The transcripts of the interview can be found in appendix)



*Figure 1.4: One-on-one user interviews being conducted*

The interview of a master's student was meant to gain insights from someone with extensive academic expertise, potentially providing a broader perspective of online courses in the context of higher education.

Engaging with undergraduate students enabled for the capture of insights from those in the midst of their academic journey, providing perspectives that relate with those in the early stages of their educational aspirations.

Furthermore, the involvement of professionals helped the learning of professional insights. Their experiences provided insights into the practical utility of online courses in the context of professional advancement and constant learning.

The idea of organising focus group sessions was also initially looked at, but it was ultimately rejected. The choice to conduct one-on-one interviews was driven by the fact that individuals frequently face the issue of finding suitable courses on their own.

Through one-on-one interviews, a strong emphasis was placed on recording individuals' unique personal experiences. The purpose of these interviews was to gain insight into their

experiences with MOOC websites, the challenges they faced, and the solutions they found. Furthermore, their decision-making aspects were looked into, such as their openness to new platforms for course finding and what features they wished such platforms would provide.

During the one-on-one interviews, insightful narratives and firsthand insights were acquired, contributing to a better understanding of their experiences and needs.

### **Key findings**

Individual interviews revealed a noticeable and recurring issue: a shared obstacle faced by individuals, whether professionals or students. This difficulty was strongly related to the concept of "choice overload," which was discussed in the literature review. The problem began from an overabundance of options, which became especially apparent when exploring multiple course websites in search of suitable opportunities to learn.

The participants highlighted a common set of challenges they experienced along the way. The most difficult tasks were carefully comparing course offers and managing the complexities of pricing ranges. One participant described an unhappy occurrence in which she spent time and effort into completing a course only to realise afterwards that it was not free. Clearly, there is a prevalent necessity to give basic course details beforehand in order to avoid such problems.

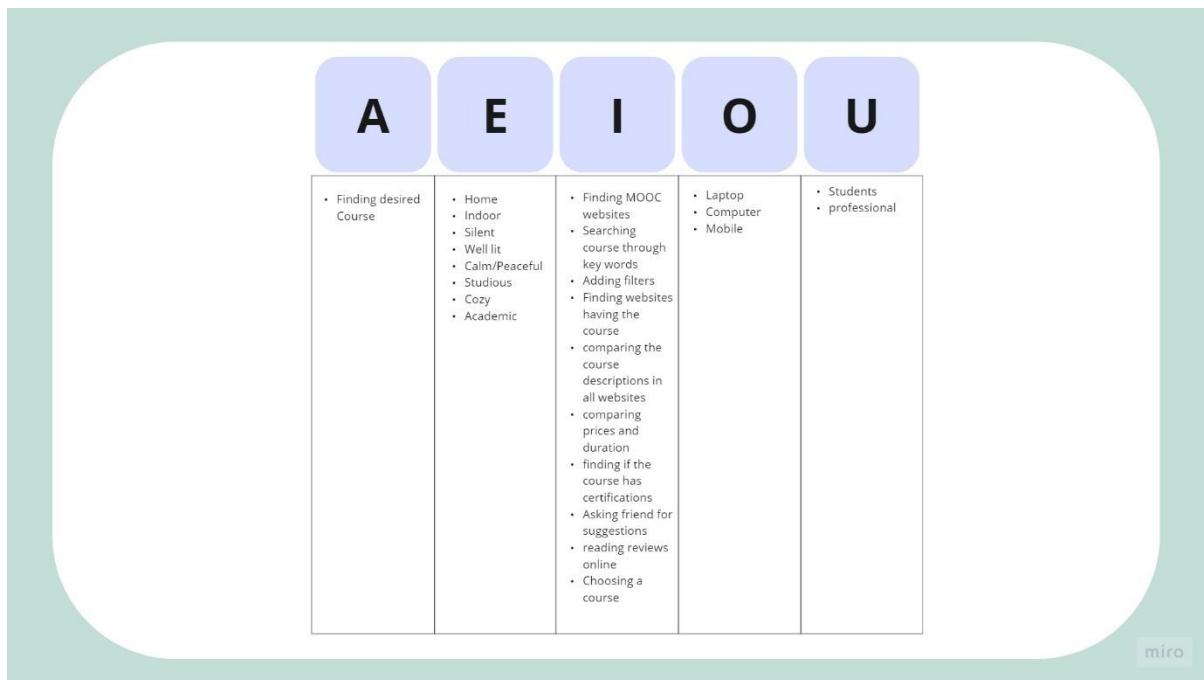
Another interviewee shared their wish, saying, "I wish for something akin to Skyscanner for MOOCs websites." This statement highlighted the interviewee's desperate need for a quick way to find their preferred courses.

### **Task observations**

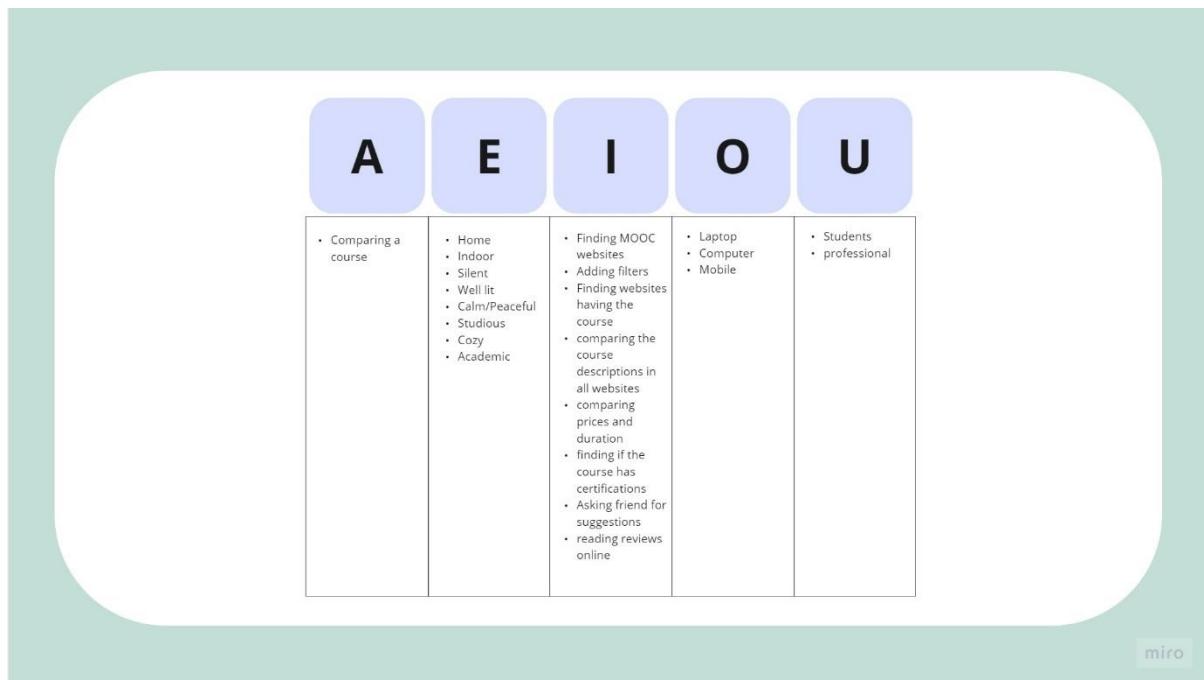
Potential learners were closely monitored as they performed various tasks while using MOOC websites, such as finding a course, comparing a course, and enrolling into online courses. The goal was to get a thorough understanding of their workflow, identify potential problems, and analyse their process using AEIOU framework, which includes activity, environment, interactions, objects, and users.

The activities performed by them were analysed using the AEIOU framework, documenting their actions and behaviours while performing MOOC website related tasks. The main focus was on the consumers themselves, attempting to comprehend their wants, preferences, and obstacles experienced during the process.

The purpose of this technique was to get important insights into the issues of the participants by doing this in-depth research.



*Figure 1.5: AEIOU for finding desired course.*



*Figure 1.6: AEIOU for comparing a course.*

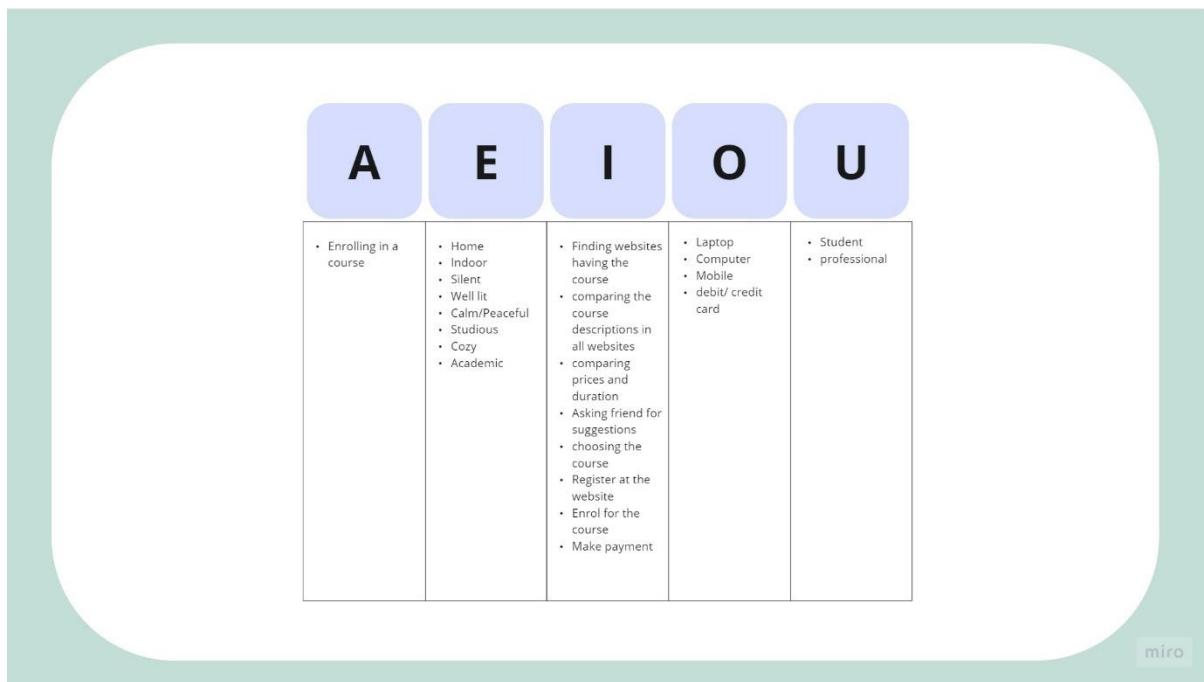


Figure 1.7: AEIOU for enrolling in a course.

## Define

The second phase in the design thinking process is the "Define" stage. During this stage, we employ techniques such as brainstorming to generate a large number of new ideas. Following the brainstorming rule, even the most implausible ideas and solutions are evaluated. To come up with good ideas, you must be knowledgeable about the subject as well as bright, daring, and imaginative. (15)

The main objective during this phase is to thoroughly understand and comprehend the nature of the problem at present which has been found during the emphasise phase with the help of literature review, surveys, interviews and AEIOU method, as well as any restrictions or limitations that may be related with it. This thorough understanding then provides the foundation for developing a solution that is not only more precise but also more customised to address the problem's specific issues.

## Problem statement

A problem statement is a brief description of the issue that must be resolved. It's a useful framing device, focusing the team on the issue that needs to be explored and then solved. A problem statement specifies what has to be done in discovery and what is not (Rosala, 2021).

To effectively express the situation at hand, a well-crafted problem statement should include several important parts.

Understanding the problem statements involves understanding knowing what the issue is, figuring out which division, organisation, or group of person it corresponds to, and researching the causes of its origin. The cause of the problem must be explained. It is essential to describe how the problem affects consumers in the problem statement. Included in this is a description of the precise effect on users and their experiences. Consider the impact on users of not fixing the problem as well, emphasising the possible negative outcomes they might encounter.

During the empathise phase, a list of difficulties related to choice overload and decision-making problems emerged. Individuals frequently mentioned difficulties navigating the abundance of selections, uncertainty about course duration, affordability problems, and doubts about the reliability of reviews. The obstacles were not only technical in nature, but they also struck an emotional chord with people, generating sentiments of perplexity, uncertainty, and even frustration.

To come up with a problem statement by understanding the issues faced, the 5 Ws method was used which involved answering the following questions (Rosala, 2021)

- **Who** is affected? - prospective learners looking for online courses

- **What** is the problem? – too many MOOCs website available causing choice overload and decision making difficulties
- **Where** does this problem occur? – it specifically happens online
- **When** does the problem occur? – while deciding an online course
- **Why** does the problem matter? It influences the quality of educational outcomes for prospective learning looking for online courses

Following this process, I came up with a problem statement –

*"Providing potential learners with a more effective means of selecting MOOCs for online learning could result in better educational performance with a deeper, more holistic learning experience."*

## Affinity Diagrams

The next step was to analyse the data gathered from the surveys and interviews. The use of affinity diagrams substantially improved this process while also helping in understanding of the gathered data. These diagrams showed patterns, themes, and relationships by focusing similar findings and insights, efficiently condensing the data into understandable bits.

Miro, an online tool for making visual maps and graphs, was used to conduct this study. The key findings were written on digital post-it notes, and then a card sorting method was used to properly categorise comparable information. This method helps in the identification of shared categories, offering valuable insights into the difficulties that prospective learners face when looking for courses. The following diagrams shown below are the Affinity diagrams of one Bachelor, and one professional person. (The interview transcripts can be found in appendix)

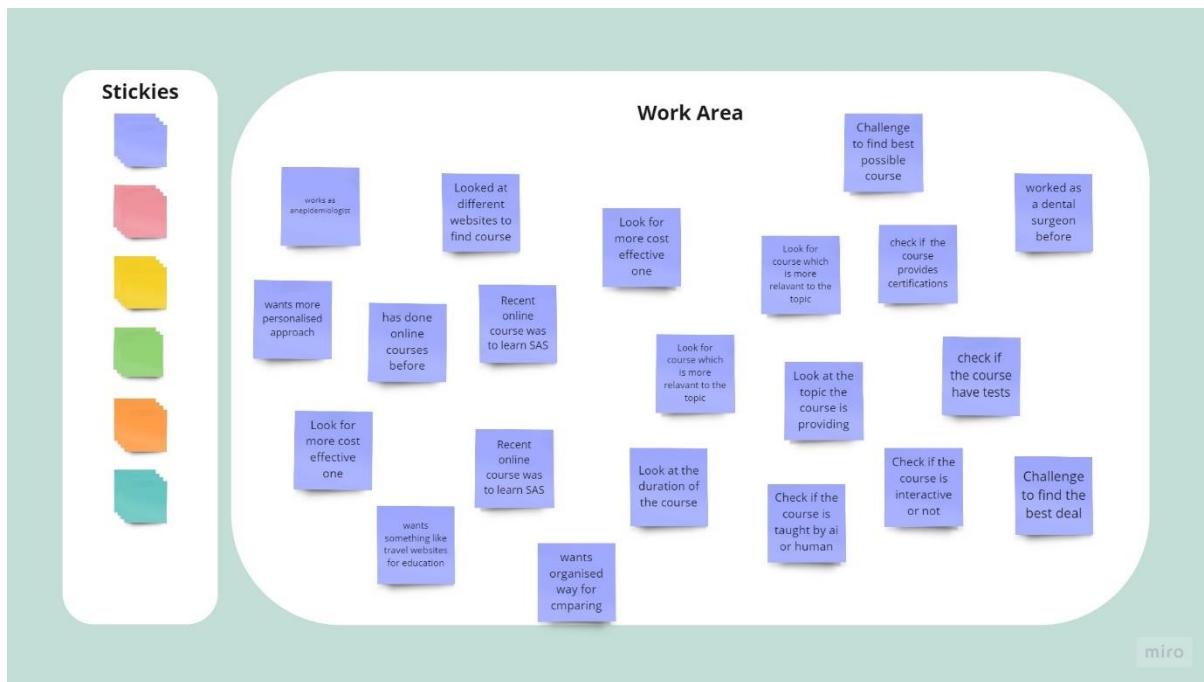


Figure 2.1: Data collected from master's student interview.

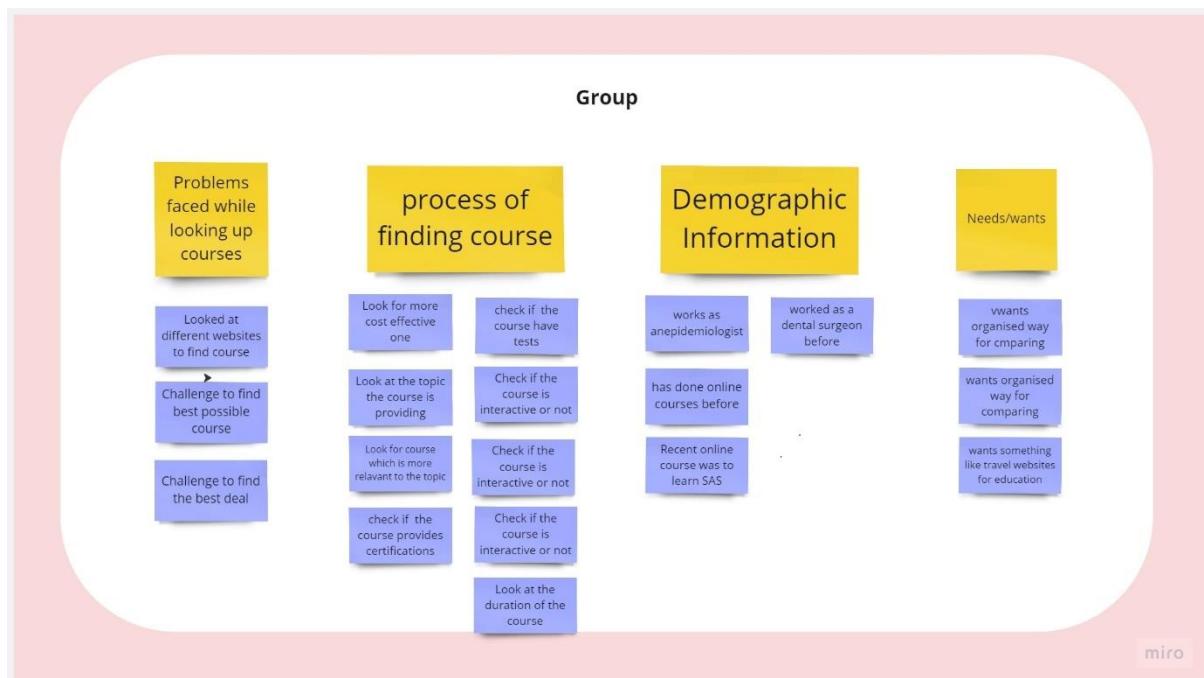


Figure 2.2: Affinity diagram for master's student.

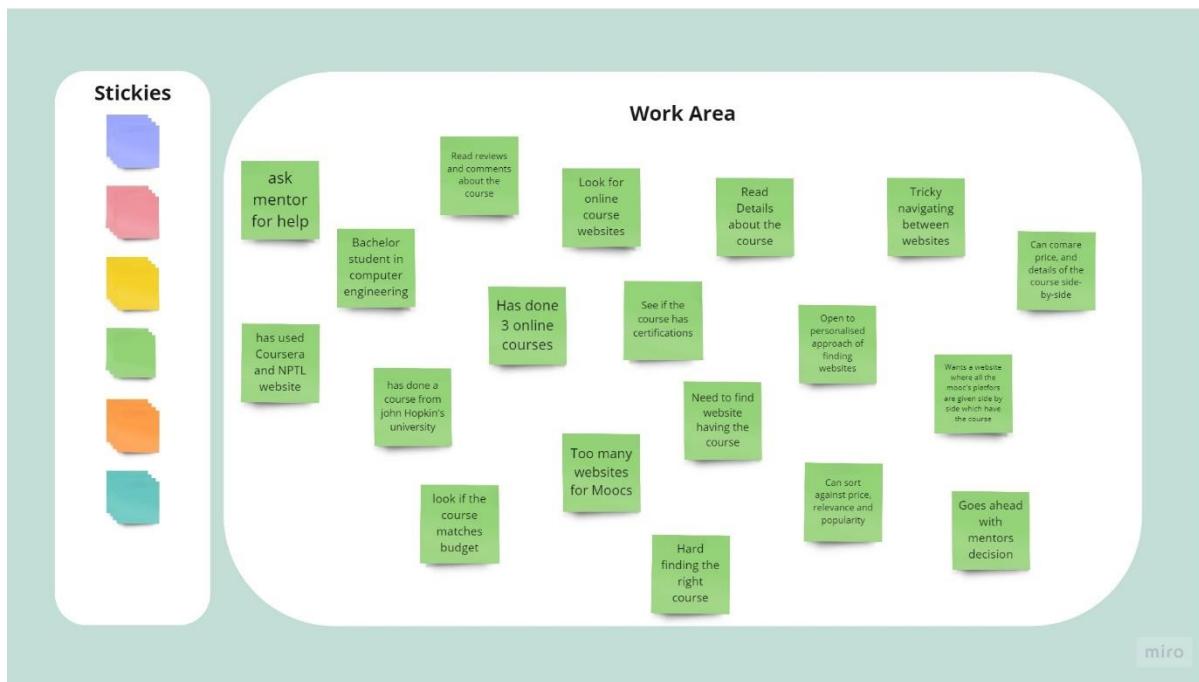


Figure 2.3: Data collected from professional's interview.

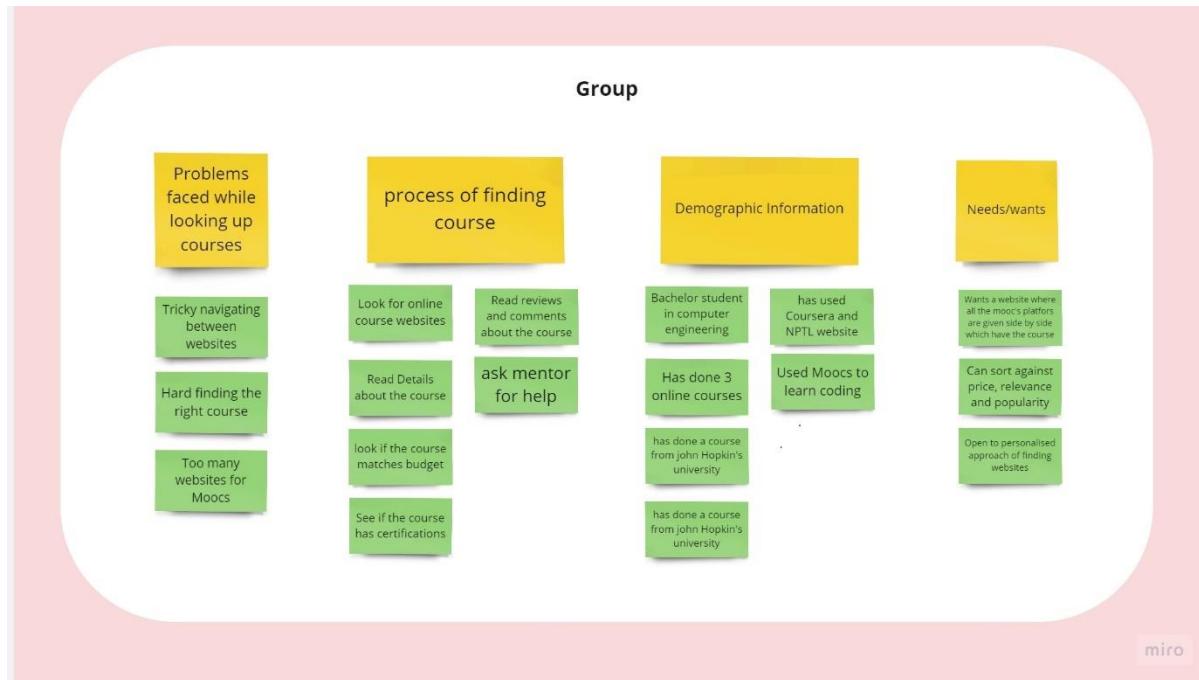


Figure 2.4: Affinity diagram for a professional.

## Pain Points

User's discomforts that they have when using a specific product are referred to as pain points. They come in a variety of forms and can range from severe to barely noticeable. Finding

user pain points is a step towards resolving their issues. In order for designers to empathise with people, gain insights into their experiences, and find opportunities for innovation and development, it is important to define pain points.

Based on the analysis of surveys and interviews conducted, a number of significant difficulties that learners have when they are looking for an online course was found:

- 1) **Navigational Challenges:** Many students stated that they had trouble navigating between various websites without getting overwhelmed. They struggle to use the many platforms effectively.
- 2) **Course selection struggle:** A significant number of respondents found it difficult to choose the proper course among the wide range of possibilities available. When attempting to choose the course that best suits their needs, they frequently encounter confusion.
- 3) **Finding the Best Course:** Selecting the best course of study from among several possibilities is another issue that many people have. Students frequently struggle to find the best course that fits their objectives.
- 4) **Finding the Best Deal:** A lot of students mentioned how difficult it was to get the best discounts or offers on online courses. Finding affordable choices can occasionally be a laborious and time-consuming process.

The problem statement was developed by understanding the specific pain points identified by potential learners.

## Personas

Personas are made-up characters that are developed based on research to reflect the many user types who might use your service, product, website, or brand in a similar manner. It helps in better understanding of your users' needs, experiences, behaviours, and ambitions by creating personas (Dam and Siang, 2019).

Personas for the project were created using information from interviews and surveys. These personas served as hypothetical representations of the target market, improving understanding of their needs and the capacity to convey them clearly. Three unique characters have been created. Taking advantage of these personalities helped in making design decisions that effectively addressed potential learner's difficulties.



**SARAH JONES**

**USER PERSONA 1**

<b>Demographics</b>	<b>Character</b>	<b>Values</b>	<b>Context</b>
<ul style="list-style-type: none"> <li>Age: 30</li> <li>Owner of a Boutique</li> <li>New to Online Courses</li> </ul>	<ul style="list-style-type: none"> <li>Ambitious</li> <li>Detail oriented</li> <li>Comfortable with technology</li> <li>Paranoid about online courses</li> </ul>		<b>Where am I?</b> <ul style="list-style-type: none"> <li>Sarah's boutique is located in one of the busiest streets in London</li> </ul>
<b>Actions, Motivations and Pains</b>			
<b>What do I do?</b> <ul style="list-style-type: none"> <li>Sarah is a boutique owner</li> <li>She has a team under her who help us in running the store</li> <li>Stays updated with fashion trends and sourcing high-quality items</li> </ul>	<b>Why do I do it?</b> <ul style="list-style-type: none"> <li>passionate about fashion and entrepreneurship</li> <li>She values independence and enjoys the creative aspects of running her own business.</li> </ul>	<b>What convinces me?</b> <ul style="list-style-type: none"> <li>Sarah is driven by the potential for growth and expansion.</li> <li>She believes that learning new skills could help her take her boutique to the next level</li> <li>She's open to exploring online courses that she can apply to her business to grow</li> </ul>	<b>What's my day-to-day?</b> <ul style="list-style-type: none"> <li>Reading blogs about business strategies</li> <li>considers taking her first online course to gain the skills she needs for online growth.</li> </ul>
<b>What do I want?</b> <ul style="list-style-type: none"> <li>Sarah wants to grow her business beyond and open branches in different cities</li> <li>Join a business course online which can help her learn how it's done</li> <li>Join a business course which she can manage with her boutique</li> </ul>	<b>What's stopping me?</b> <ul style="list-style-type: none"> <li>She has never done an online course before.</li> <li>She is not sure where to look for courses online</li> <li>Not sure if she'll be able to find a course which she can manage with running the boutique</li> </ul>	<b>What or who informs me?</b> <ul style="list-style-type: none"> <li>She wants to learn from experts</li> <li>Sarah is influenced by success stories of other entrepreneurs</li> </ul>	

Figure 2.5: User persona OF Sarah Jones.



**LILY JOHNSON**

**USER PERSONA 2**

<b>Demographics</b>	<b>Character</b>	<b>Values</b>	<b>Context</b>
<ul style="list-style-type: none"> <li>Age: 47</li> <li>Housewife and Mother of 2</li> <li>Pursuing an Online MBA for a late-career change</li> </ul>	<ul style="list-style-type: none"> <li>Curious</li> <li>Comfortable with technology</li> <li>Fast learner</li> </ul>		<b>Where am I?</b> <ul style="list-style-type: none"> <li>Lily resides in a suburban neighbourhood in Texas, America</li> <li>She has joined online communities related to and online education</li> </ul>
<b>Actions, Motivations and Pains</b>			
<b>What do I do?</b> <ul style="list-style-type: none"> <li>takes care of her two children</li> <li>Lily manages household responsibilities</li> <li>She's also actively exploring the possibility of pursuing higher education</li> </ul>	<b>Why do I do it?</b> <ul style="list-style-type: none"> <li>Lily wants to fulfil her aspiration of having a career</li> <li>she seeks financial independence.</li> <li>She wants personal growth</li> </ul>	<b>What convinces me?</b> <ul style="list-style-type: none"> <li>She's drawn to courses that offer flexibility and convenience</li> <li>She wants to do an online course in MBA</li> <li>Looking for opportunity to acquire skills that can contribute to her</li> </ul>	<b>What's my day-to-day?</b> <ul style="list-style-type: none"> <li>Lily's daily routine involves managing household tasks</li> <li>maintaining a comfortable home environment</li> <li>she researches online MBA programs and explores courses online</li> </ul>
<b>What do I want?</b> <ul style="list-style-type: none"> <li>Lily wants to find an online course to get her MBA degree</li> <li>She's interested in expanding her knowledge and skill set</li> <li>She wants to find a job in this area</li> <li>She wants to find a job in this area</li> </ul>	<b>What's stopping me?</b> <ul style="list-style-type: none"> <li>She's concerned about re-entering the education system after a long hiatus</li> <li>Lily's main challenge is juggling her household responsibilities with higher education</li> <li>She is not sure on how to find the right course online which will be beneficial for her</li> </ul>	<b>What or who informs me?</b> <ul style="list-style-type: none"> <li>educational platforms offering online MBA programs.</li> <li>She also seeks advice from friends</li> <li>Lily gathers information from online articles, career development websites</li> </ul>	

Figure 2.6: User persona of Lily Johnson.

**USER PERSONA 3**

<b>Demographics</b>	<b>Character</b>		
<ul style="list-style-type: none"> <li>Age: 21</li> <li>Third Year Undergraduate Student</li> <li>University of Brighton</li> </ul>	<ul style="list-style-type: none"> <li>Curious</li> <li>Comfortable with technology</li> <li>Fast learner</li> </ul>		
<b>Actions, Motivations and Pains</b>			
<b>What do I do?</b> <ul style="list-style-type: none"> <li>Alex is pursuing a degree in computer engineering</li> <li>He's proficient in programming languages like Java and Python</li> <li>He's currently focused on expanding his skills into mobile app development.</li> </ul>	<b>Why do I do it?</b> <ul style="list-style-type: none"> <li>Alex is passionate about coding and creating innovative solution</li> <li>He's also driven by the challenge of staying current with technological advancements.</li> <li>He's excited about the potential of mobile app development</li> </ul>	<b>Values</b>	<b>Context</b>
<b>What do I want?</b> <ul style="list-style-type: none"> <li>Alex wants to learn how to develop mobile apps from scratch</li> <li>He wants an online course which provides certification</li> <li>He wants an interactive course</li> </ul>	<b>What's stopping me?</b> <ul style="list-style-type: none"> <li>Alex's main obstacle is his lack of experience in mobile app development.</li> <li>It will take up a lot of time to segregate between courses available</li> <li>Alex is overwhelmed with so many options available online</li> </ul>	<b>What convinces me?</b> <ul style="list-style-type: none"> <li>Alex is convinced by the prospect of adding app development to his skill set</li> <li>He's attracted to online courses that offer hands-on experience,</li> </ul>	<b>Where am I?</b> <ul style="list-style-type: none"> <li>Alex is a full-time student enrolled in a computer engineering program at Brighton university.</li> <li>He is an active member of coding club</li> </ul>
		<b>What or who informs me?</b> <ul style="list-style-type: none"> <li>Alex relies on tech blogs, YouTube tutorials</li> <li>He follows online communities to gather information about app development</li> </ul>	<b>What's my day-to-day?</b> <ul style="list-style-type: none"> <li>Alex's typical day includes attending classes.</li> <li>He spends most of his time working on his assignments</li> <li>He explores online resources related to app development</li> </ul>

Figure 2.7: User persona of Alex Delon.

## Empathy Maps

An empathy map is a collaborative visual that is used to express what we know about a specific type of user. It externalises user knowledge to foster a shared understanding of user demands and help in decision making.

The user or persona is in the centre of the empathy map, which is divided into four quadrants that are - Says, Thinks, Does, and Feels. Empathy maps, which are not chronological or sequential, provide a glimpse into who a person is as a whole.

Within the project, three customised empathy maps were made, each adapted to a separate persona. All four portions of these empathy maps were thoroughly completed in order to gain a comprehensive understanding of the users' perspectives. This approach provided insightful information about users' mental processes, emotions, actions, and communication styles.

These insights were derived from the extensive data gathered throughout the empathise phase. The resulting empathy maps are shown below.

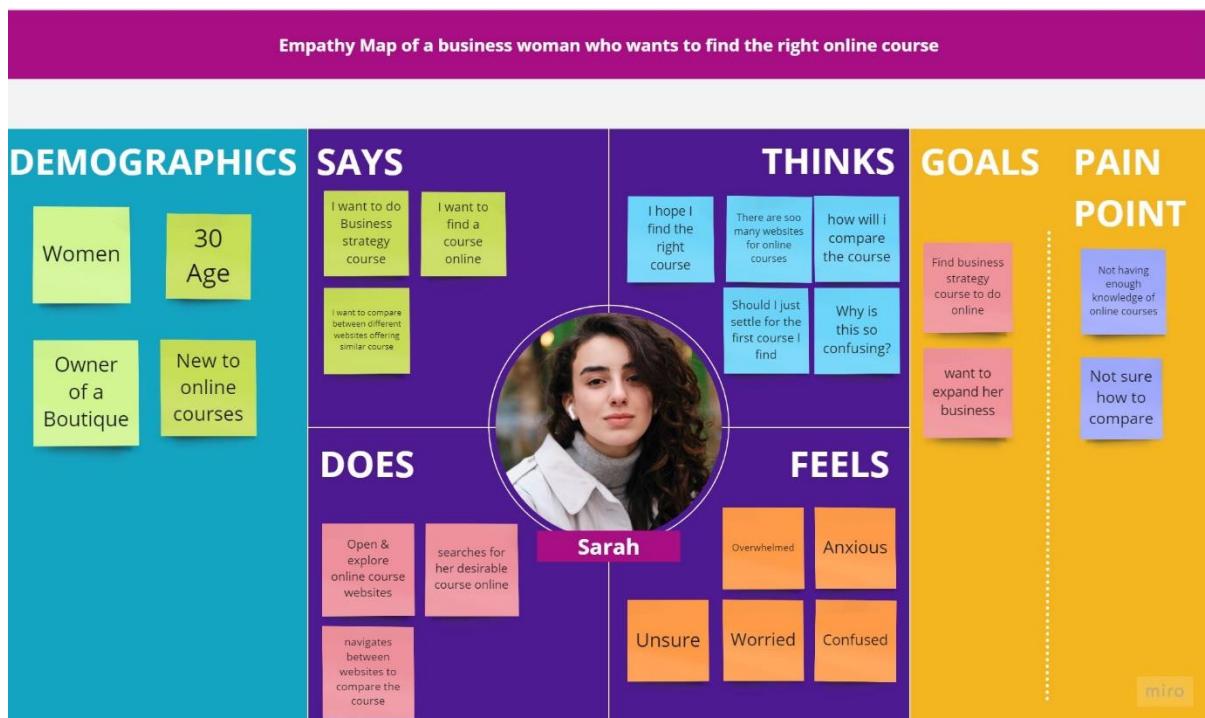


Figure 2.8: Empathy map of Sarah Jones.

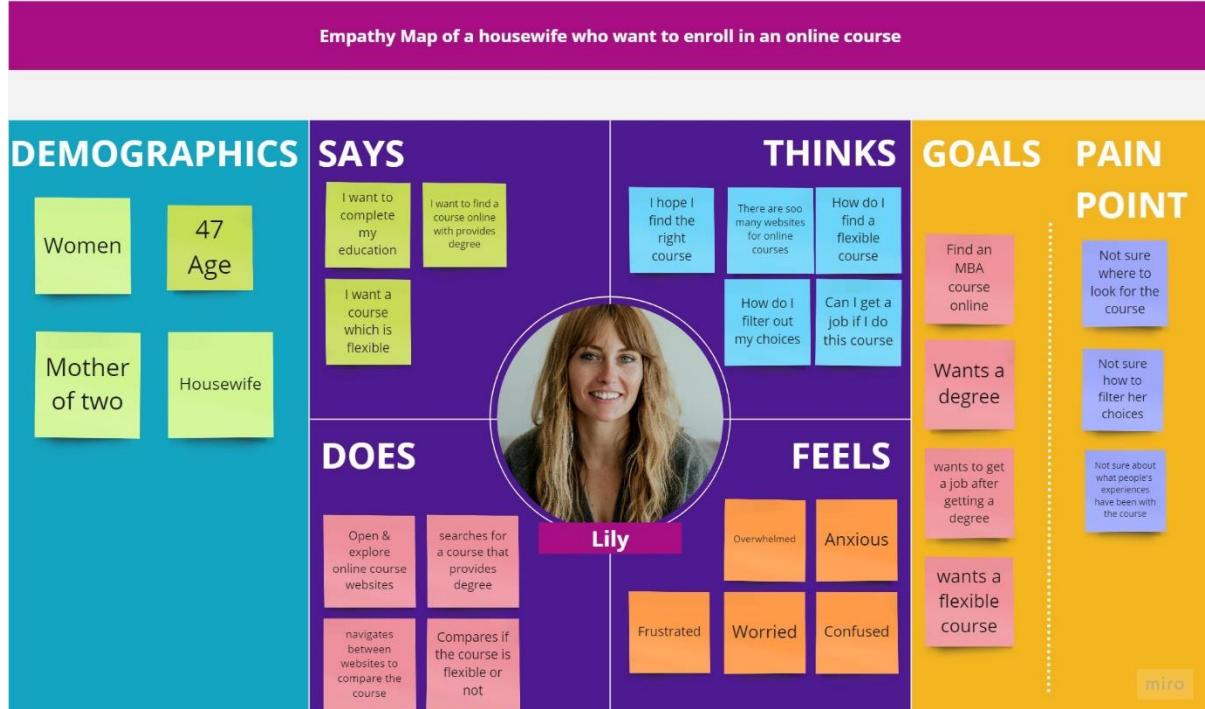


Figure 2.9: Empathy map of Lily Johnson.

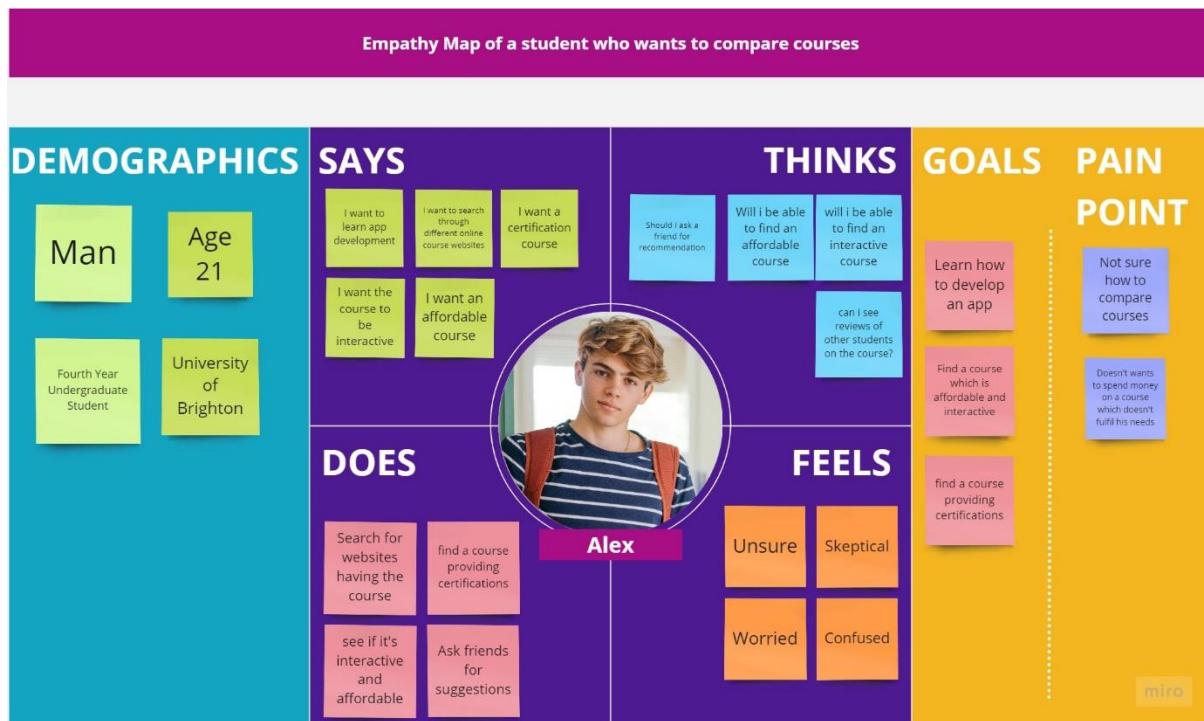


Figure 2.10: Empathy map of Alex Delon.

## Customer Journey Maps

A customer journey map is a diagram that shows the steps someone takes to complete a task (Gibbons, 2018).

A journey map is created by compiling a sequence of steps that a user performs and arranging them in chronological order, similar to a timeline. These processes are further improved by including the user's feelings, thoughts, and reactions, that help in the construction of a story about their experience. This story is then polished, modified, and made more compact. The end result is a visualisation that depicts the full path of the user.

Customer journey maps were created as an integral part of the project using information gained from identifying consumer concerns. These visual representations of user experiences highlight key pain points and issues. By researching into the user's journey, a better understanding of their demands and potential upgrade opportunities was gained.

The two customer journey maps presented below were constructed to serve as a valuable source of user viewpoints, influencing subsequent decision-making processes.



Figure 2.11: Customer journey map of Alex Delon.



Figure 2.12: Customer journey map of Sarah Jones.

## POV statements

Developing a strong Point of View (POV) allows the designer to brainstorm and approach problem with a clear aim in mind. This goal remains focused on the users, understanding their needs, and exploiting your valuable knowledge of them.

The POV statement must include three elements:

individual: Describes the specific individual you're focusing on in your POV.

Need: Identifies the user's critical requirements or objectives.

Because: Condenses the collected knowledge into a standout insight that can influence solution design.

POV statements were created using useful insights from user personas and pain points found through affinity diagram analysis. This method helped in the development of the following points of view:

### Sarah

Sarah is a Business woman who  
**needs** to find a business strategy online class  
**because** she wants to expand her boutique and open new chains

### Alex

Alex is an undergraduate student who  
**needs** to Enrol in an interactive certification online course  
**because** he wants to learn app development

### Lily

Lily is a Housewife who  
**needs** to do an online MBA course while managing her household duties  
**because** She wants to complete her higher education and find a job

## How Might We

By rephrasing challenges into a question that demands for a resolution, a "How Might We" (HMW) statement changes the way to convey your problem. By framing the approach to the issue and potential solutions, it transforms issues into opportunities for creative thought.

POV statements were created using helpful data from user personas and pain areas uncovered through affinity diagram analysis. This method assisted in the development of the following points of view:

Sarah is a Business woman who  
**needs** to find a business strategy online class  
**because** she wants to expand her boutique and open new chains

How might we simplify finding new course

HMW make online courses more accessible

HMW help filter out her choices

HMW ensure that the online platform offers her good options

HMW make this process more efficient

Figure 2.13: HMW for Sarah Jones's POV.

Alex is an undergraduate student who  
**needs** to Enrol in an interactive certification online course  
**because** he wants to learn app development



*Figure 2.14: HMW for Alex Delon's POV.*

Lily is a Housewife who  
**needs** to do an online MBA course while managing her household duties  
**because** She wants to complete her higher education and find a job



*Figure 2.15: HMW for Lily Johnson's POV.*

## Ideate

The Nielsen Norman Group defines ideation as the practice of generating a wide range of ideas regarding a certain issue without casting criticism on them. This creative phase occurs during the design process and is the third step.

The amount of ideas is more important than their quality during ideation. The emphasis is not on assessing concepts, but on generating a large number of them. The basic goal of an ideation session is to unearth new viewpoints and uncharted directions—essentially, to think outside the box.

At this stage, creativity is critical. The major goal is to find the best approach to reducing learner overload. The choice made is influenced by the information gathered in the previous phases of the procedure.

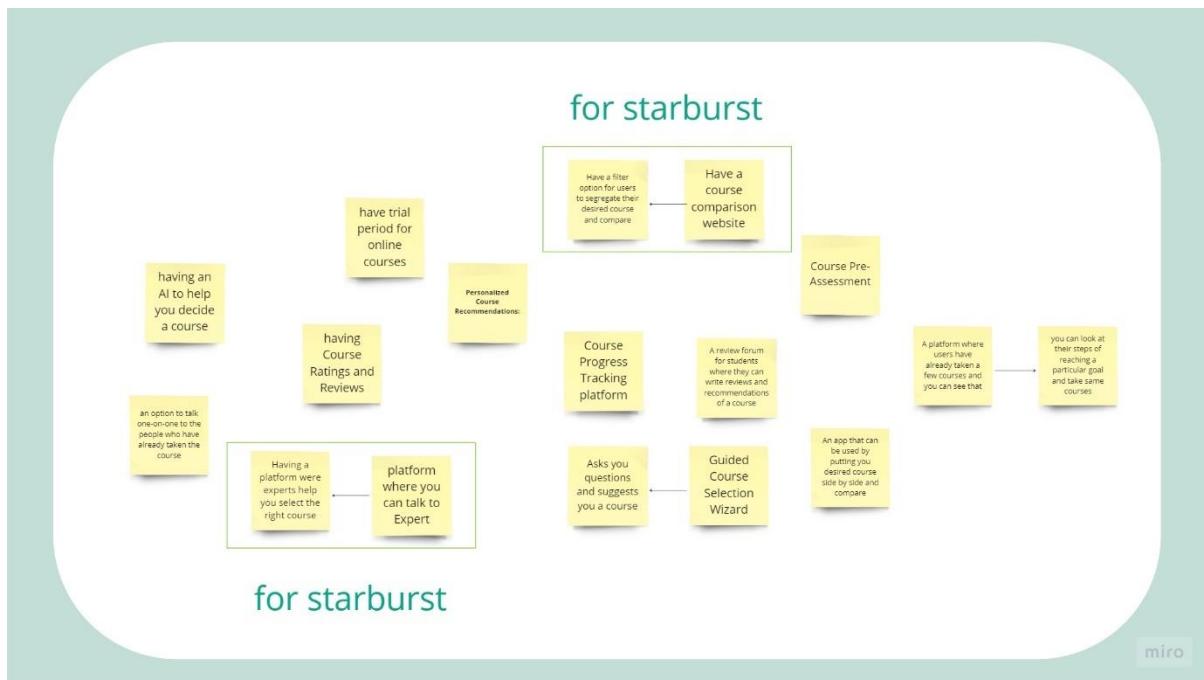
In basic terms, ideation creates an open and imaginative environment in which options flow and creative thinking takes the lead.

## Brainstorming

The brainstorming process began in early August, using the traditional ideation approach to produce possible solutions to the issues faced by prospective learners. This method entailed coming up with an extensive number of viable problem-solving options. A range of potential concepts were created as a result of this method.

- 1) The idea of an AI-driven assistant was one of the interesting concepts that surfaced. By talking with users and learning about their wants and interests, this virtual assistant would be able to offer courses and guide you through the enrolment process.
- 2) As a possible solution, the idea of having professionals or mentors in the industry who might direct students and suggest suitable courses gained traction.
- 3) Additionally, the idea of having professionals or mentors in the industry who might direct learners and suggest appropriate courses as a possible solution.
- 4) Additionally, the idea of a comparison platform was taken into consideration, where students may assess and enrol in courses after comparing their features and benefits.

In addition to these, a number of other original concepts also emerged throughout the brainstorming process, some of which can be seen in the figure below.



*Figure 3.1: Miro board imagery of brainstorming.*

The purpose of this ideation process was to harness creativity and new thinking in order explore a wide range of alternatives that could successfully address the issues encountered by prospective learners enrolled in online courses.

## Idea finalisation

As potential solutions, two intriguing concepts were chosen from the brainstorming session. The first idea was to create a platform where users could interact with experts or mentors, while the second was to create a course comparison website.

The starbursting technique was used to get a more comprehensive knowledge of these concepts. This technique involved asking probing questions about every idea (Who, what, Where, When, Why, How) These questions allowed for a more in-depth analysis of the ideas, allowing for an in-depth look of their complexities

Using this approach was critical in finalising the concept of course comparison as the most viable solution. This idea showed the ability to efficiently handle a wide range of user difficulties. The alternate approach, on the other hand, presented a number of questions, complicating the application's function and use. As a result, the course comparison method emerged as the most promising choice, providing a clear path to resolving user issues.

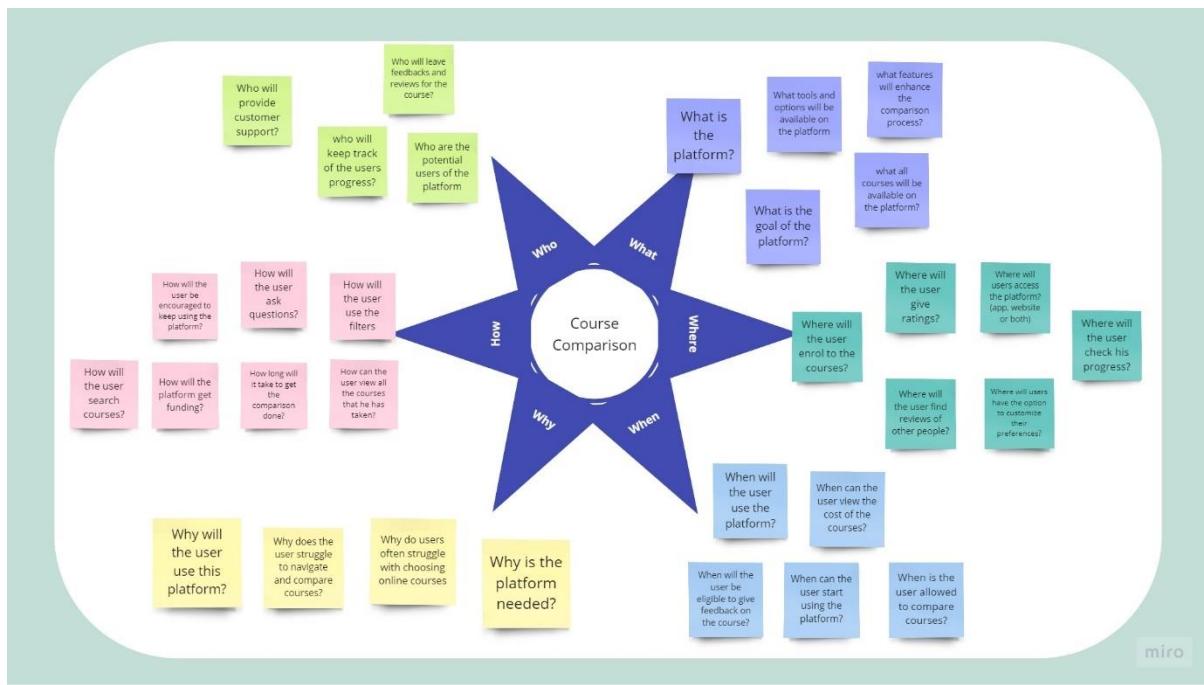


Figure 3.2: Miro board imagery of starbursting for course comparison.

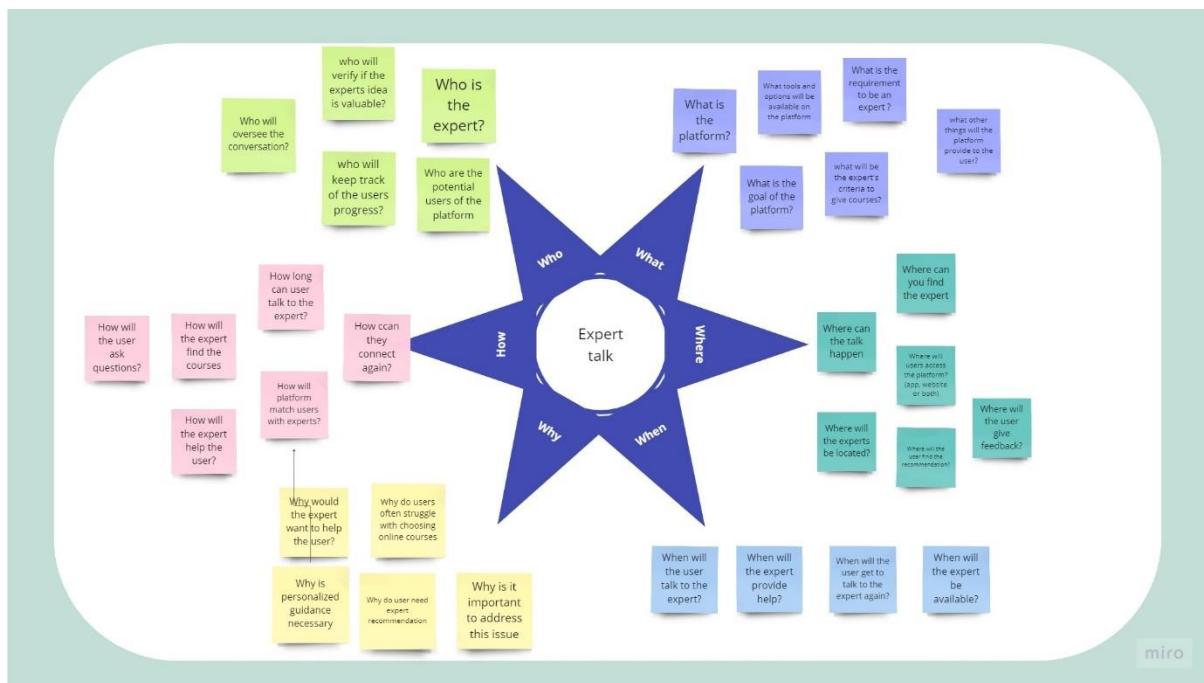


Figure 3.3 : Miro board imagery of starbursting for expert talk.

## Research

### Technical aspects

A feasibility study was carried out prior to moving further with the project. Well-known platforms such as Skyscanner and Trivago were investigated to see how they use comparison features to tackle choice overload in their respective sectors (Lathia, 2017). A thorough background investigation was conducted in order to determine the technological requirements for developing a comparison website. Skyscanner and Trivago, for example, effortlessly integrate a set of APIs (Application Programming Interfaces). These APIs, in the context of Skyscanner, offer access to real-time flight pricing from numerous airlines and booking platforms, simplifying data retrieval (developers.skyscanner.net, n.d.).

In the case of trivago, it also uses a ranking algorithm to the search results. This algorithm takes into account various factors such as price , location, user reviews, aminities, and more. The goal of trivago is to present the most relevant and appealing options to the user based on their search criteria.

When consumers click on a specific hotel promotion, these websites typically redirect them to the relevant booking site. Users can then complete their reservations on the appropriate platform.

It was important to determine the availability of APIs from other educational websites in the context of a platform created for course comparison. An thorough Internet search was done to this purpose, supported by insights from a software engineer who assisted in discovering relevant APIs available on the internet.

The incorporation of APIs from educational websites plays a critical part in the platform's development, determining its basic functionality. By smoothly integrating these APIs, the platform obtains access to a massive pool of educational content spread across multiple platforms. This strategic integration enables the platform to constantly collect relevant information, resulting in the presentation of a well curated selection of courses that align with individual tastes.

This integration process is dependent on establishing a strong link between the platform and the educational APIs. These APIs come into play when users initiate course searches, acting as funnels for real-time data retrieval from a variety of educational sources. The result is a search experience that goes beyond static listings, providing consumers with a real-time view of available courses and their specific features.

The primary goal of this comparison website will be to assist users in efficiently comparing courses that are compatible with their tastes. By providing complete insights into multiple course possibilities, this technique will facilitate in decision-making. Once users have made their choice, the platform will smoothly direct them to the course's specific page. Users can then proceed with the enrolling procedure.

### **Business aspect**

It was necessary to delve into the organisational structures of major companies like Trivago and Skyscanner in order to comprehend the intricate business dynamics of a comparison website. These platforms, which are well-known in their respective fields, generate revenue through a model based on network marketing and advertising partnerships.

These major companies survive by collecting referral commissions from internet travel firms and booking platforms. This commission is triggered when a user clicks on an airline or hotel deal, which takes them to a booking site to complete their reservation. The financial gain is often a percentage of the total booking value.

Skyscanner uses a booking funnel technique in the travel industry, which is commonly referred to as the "booking funnel." This order shows that clients typically book flights first, followed by hotels, and then cars and other supplemental services. Skyscanner takes advantage on its strength in the first stage of this funnel, flights, by providing a variety of selected material. It's worth mentioning that, while flights have a high sales volume, they have the lowest profit margins of any travel option (Smu.edu.sg, 2022).

Trivago, on the other hand, uses a cost-per-click model. Trivago, which operates on the aggregator trip model, is responsible for systematically organising and optimising query results. Companies who want to advertise or list on the site must pay a fee. This cost is charged whenever a user clicks on a listing and is led to the hotel's website. This cost-per-click solution bridges the gap between user intent and financial transactions efficiently (Hendelmann, 2022).

By applying these insights to the state of online course comparison, the intended business goal is to develop collaborations with educational platforms and obtaining referral commissions from these platforms and gaining financial support.

### **Reward system**

Aside from the course comparison tool, the website can include an appealing gamification aspect to increase user engagement (Garaialde, Cox and Cowan, 2021). Using a reward system has been shown to be a successful technique for enhancing user engagement, according to study by Diego Garaialde, Anna L. Cox, and Benjamin R. Cowan (Garaialde, Cox and Cowan, 2021) Instead of waiting for long interactions before awarding users, delivering rewards right away increases the likelihood of consumers returning to the app (Garaialde, Cox and Cowan, 2021).

Rewards systems could include points, levels, badges, missions, and leaderboards, which are frequently accompanied by feedback in the form of images. These aspects work together to encourage users to engage repeatedly, encouraging them to open the app more frequently, stay longer in it, and actively participate (Garaialde, Cox and Cowan, 2021).

Based on the findings of the research, the decision was made to adopt a point-based system linked to course enrolment. Accumulated points could be converted into course cost

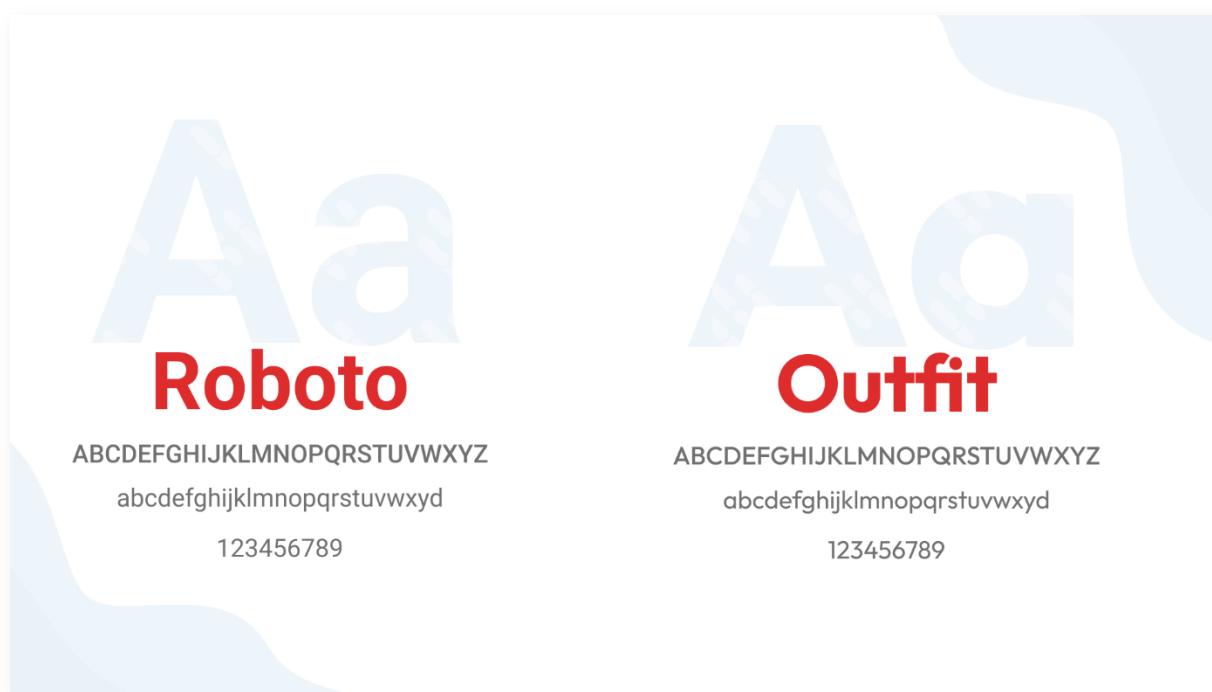
discounts, significantly increasing website engagement, and motivating potential learners to pursue their educational aspirations.

## Typography

For the website 'outfit' and 'roboto' fonts were chosen as the primary fonts. They have particular advantages for typography in educational systems. "Outfit," designed by Jeremy Dooley, has a modern feel with crisp letterforms, which increases interaction. Its various styles enable for effective hierarchy while also assuring readability in headings and body text. This font's accessibility and screen compatibility make it ideal for digital platforms.

Google's "Roboto," on the other hand, features a professional, geometric design. Its weight range promotes hierarchy, optimising content organisation. Roboto's origins in the digital domain ensure its scalability to numerous screen sizes and devices. Its accessible design, with clear lettering and spacing, caters to a wide range of learners, including those with visual impairments.

These two typefaces was to use to bring clarity and accessibility to the website. Both were used to improve the experience of the user.



*Figure 3.4: Fonts used for course comparison website.*

## Colour

The website was designed with a blue and red colour scheme that was carefully chosen to enhance the user experience. Because blue implies flexibility, educational websites frequently use it as a dominant colour scheme. Lighter blue tones, in particular, are used to establish a sense of reliability and to help with user focus.

In addition, the use of red elements on the website has a purpose other than aesthetics. Red is believed to help with memory recall, making it a good option for helping students retain important information, facts, and statistics. This colour choice was deliberate in order to increase the educational experience and the effectiveness of information absorption.



*Figure 3.5: Colours used for course comparison website.*

## Iconography

Solid symbols have been used in the website to increase their visibility and importance. The usage of solid icons over other design approaches ensures that these graphical elements stand out and effectively attract the user's attention. Illustrations have been used for depicting the reward points to make it look more engaging and appealing for the users and to employ a sense of excitement and improving the overall user experience.



*Figure 3.6 : Icons used for course comparison website.*

## Logo design

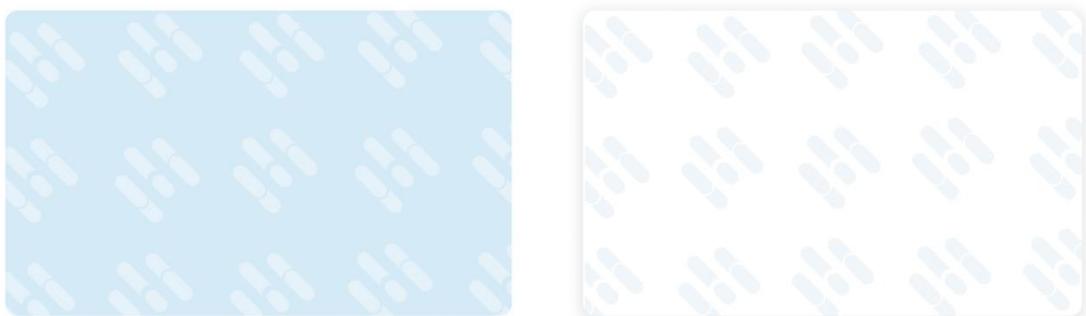
Three logos were produced for the comparison website, each of which went through several versions. The name of the website, "Coursalysis," is cleverly divided into two halves by careful selection of colours. This creative method clearly combines "course" with "analysis," successfully emphasising the website's name's fusion character. Users are instinctively prompted to figure out the fusion of these two words as a result of this design choice, strengthening the platform's identity and concentration on route analysis. Multiple rounds of refining and improving the logos were required to obtain the necessary visual impact and user understanding.



*Figure 3.7: Fonts used for course comparison website.*

## Pattern

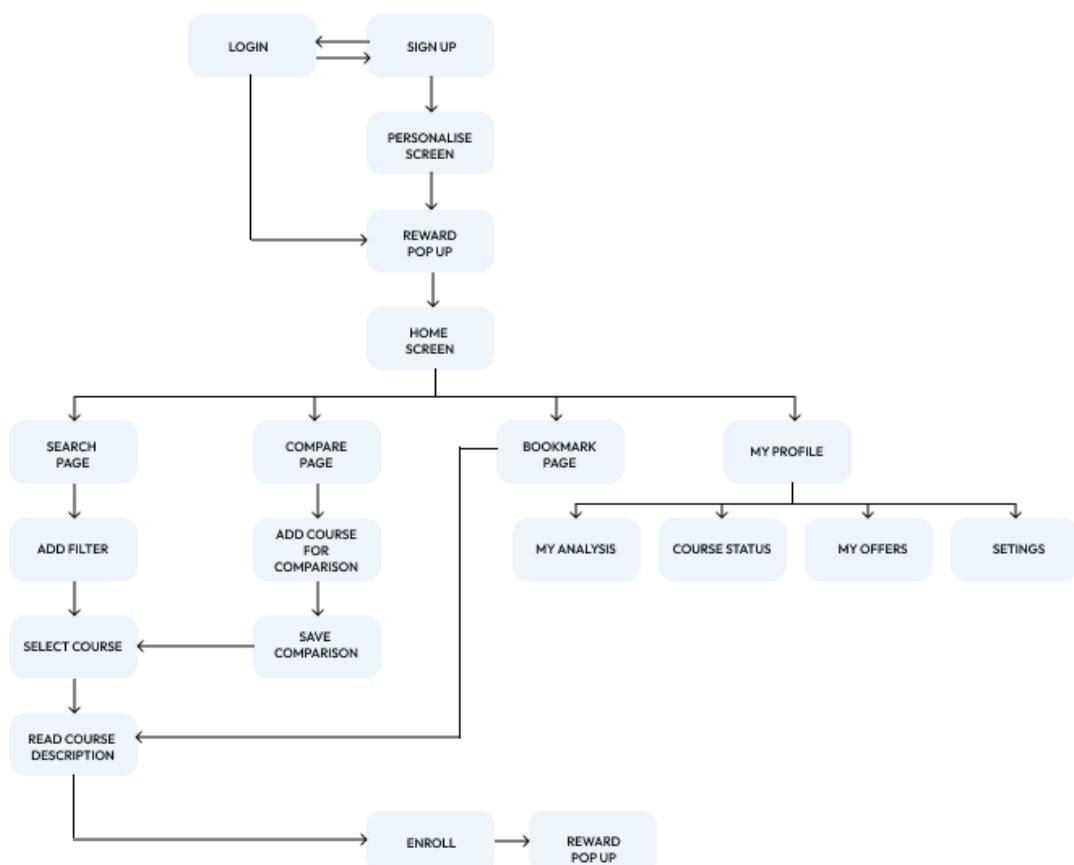
A unique pattern was carefully designed with the primary goal of strengthening the brand's identification and imprinting the logo in the brains of users. By cleverly incorporating it within the website's interface, especially within the pop-up elements, the deliberate use of this pattern within pop-ups assists to reinforce brand familiarity while providing users with a consistent visual experience.



*Figure 3.8: Pattern made Coursalysis.*

## User flow

In website design, a user flow describes the specific path a user takes as they move around the website to achieve their goals. A user flow customised for "Coursalysis" is presented below, specifically created to illustrate the path users will take to achieve a range of objectives. The major goal of this flow is to assist users in making informed choices about their selected courses, ending in an error-free enrolling procedure with less steps for an easy process.



*Figure 3.9: User flow of Coursalysis.*

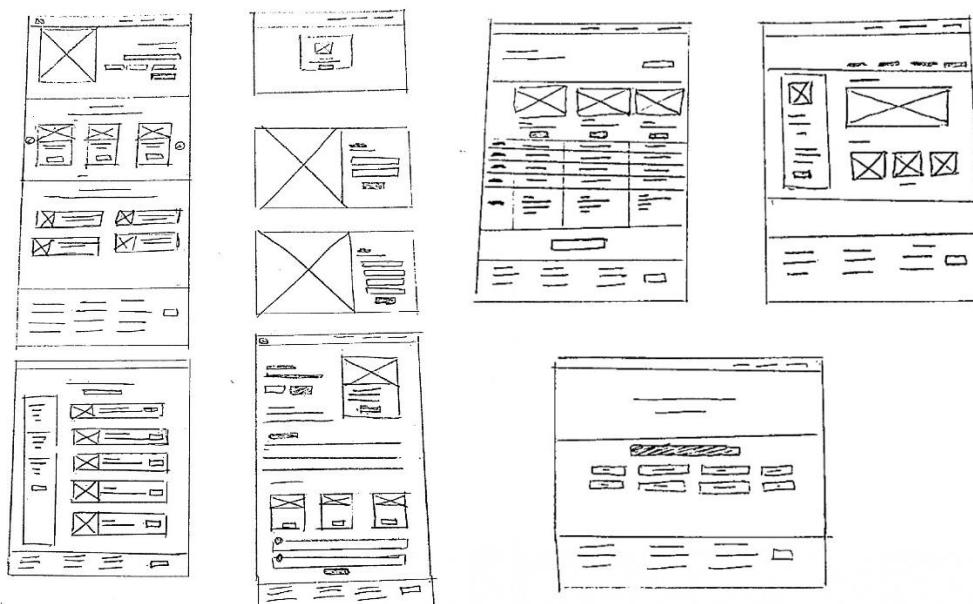
## Prototype

The prototype phase is the next step after ideation, in this phase ideas from the ideate phase is selected and a prototype is created to gain insights from the user in the best possible way. the primary goal is of this phase is to test the potential solution in a low-risk environment.

During this important phase, prototypes were created at three degrees of fidelity: low, medium, and high. Each quality level served a distinct role in better understanding user experiences and refining potential solutions.

### Low Fidelity (Low-Fi):

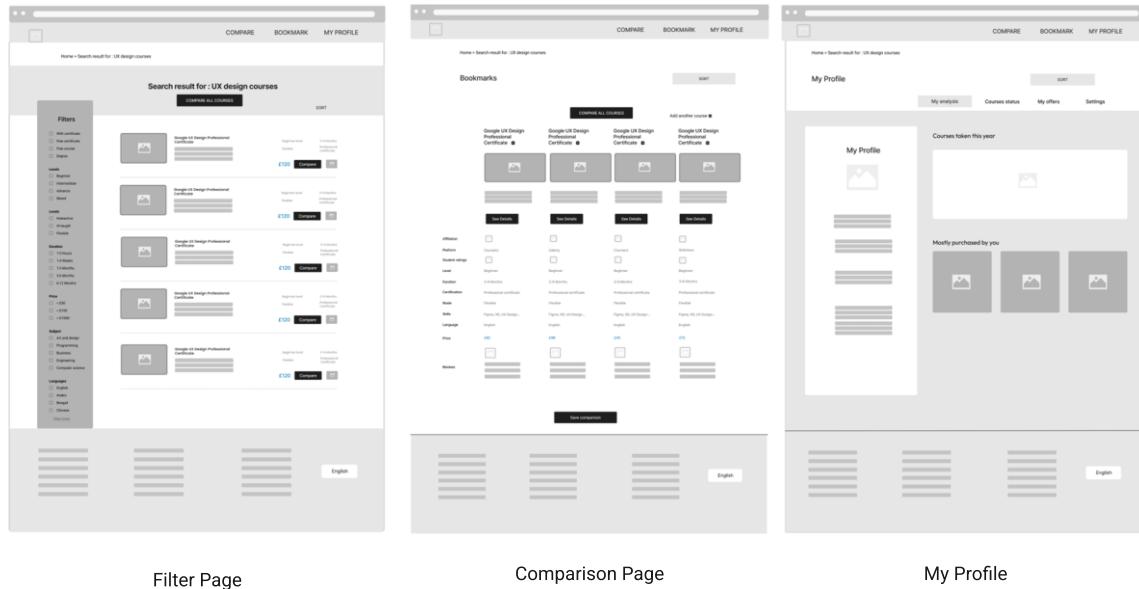
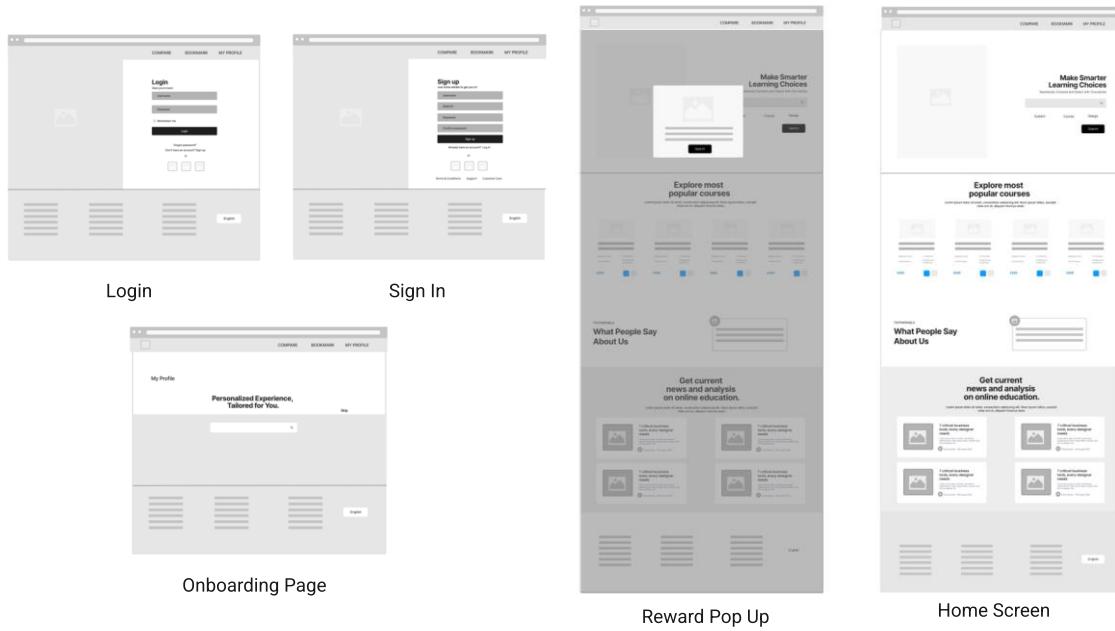
To begin, a low-fi prototype was sketched on paper to visualise the fundamental layout and how user requirements might be implemented. This simple illustration served as a model for understanding the initial concept and determining practicality. A significant priority throughout this phase was to incorporate the insights gained from studying user demands and challenges. Course comparison, personalization options, user ratings, course reputation, and pricing were all carefully researched and incorporated into the design.



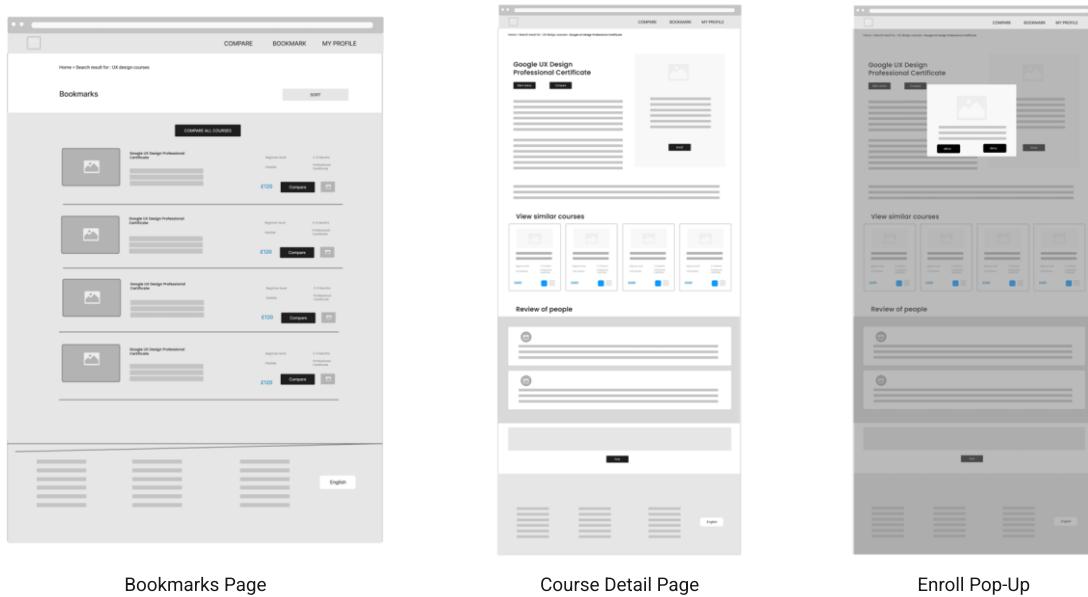
*Figure 4.1: scanned images of Low-fi prototype of coursalysis.*

## Medium Fidelity (Mid-Fi):

Using tools like FigJam, a mid-fi prototype was built on top of the low-fi prototype. This iteration gave a more structured representation of the potential appearance of the website. It converted the conceptual layout from paper to digital format for improved clarity. This mid-fi prototype was tested with customers to gain a better understanding of their wants and preferences.



*Figure 4.2: Mid-fi prototype of Coursalysis created on Figjam.*



*Figure 4.3: Mid-fi prototype of Coursalysis created on Figjam.*

## High Fidelity (Hi-Fi)

A hi-fi prototype was created after formative testing of the mid-fi prototype and incorporating user feedback. This iteration was quite detailed and closely resembled the anticipated look and feel of the final product. This hi-fi prototype was reviewed using summative testing, which is written further in the document in testing phase.

A modified and final version of the hi-fi prototype was created after examining the results of the summative testing and making necessary improvements. This version was the result of design decisions, user feedback, and gradual enhancements.

The prototype can be viewed [here](#)

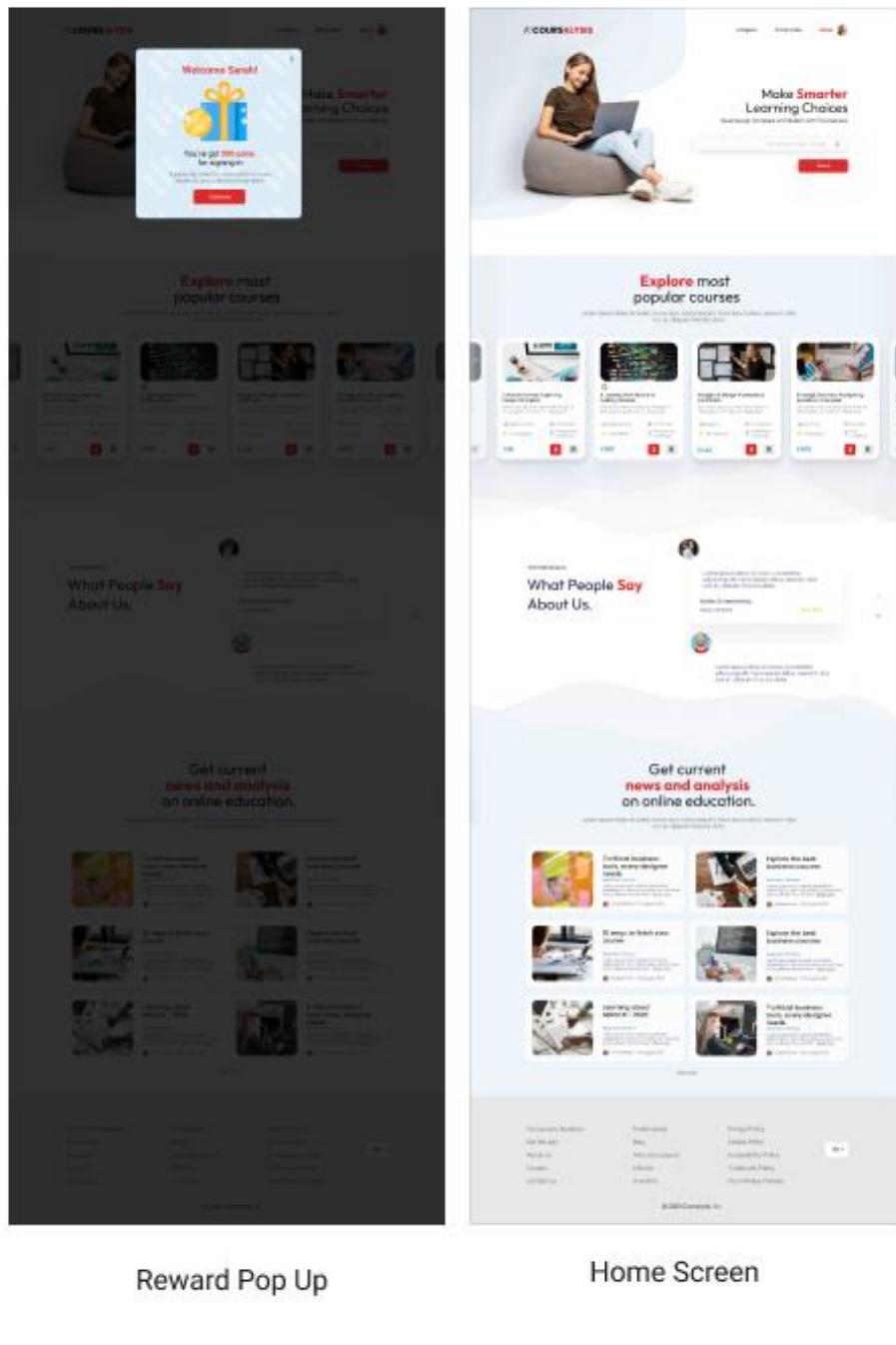


Figure 4.4: hi-fi prototype of Coursalysis created on figma.

Figure 4.5: hi-fi prototype of Coursalysis created on figma.

The image displays two side-by-side screenshots of the Coursalysis website.

**Left Screenshot (Search Page):**

- Header:** COURSALYSIS - Discover courses online, Compare, Ratings, Log in.
- Breadcrumbs:** Home > Search result for: UX design courses
- Title:** Search result for: UX design courses
- Text:** More than 100000 results
- Filter Buttons:** Compare selected courses, Sort by
- Course Listings:**
  - Google UX Design Professional Certificate
  - Google UX Design Professional Certificate
- Page Navigation:** Page 1 of 10 pages, 2
- Footer:** Contact Business, Contact app, About us, Careers, Contact us, Terms and conditions, Privacy Policy, Accessibility Policy, Help and support, Affiliates, Investors, © 2022 Coursalysis, Inc.

**Right Screenshot (Comparison Page):**

- Header:** COURSALYSIS - Discover courses online, Compare, Ratings, Log in.
- Breadcrumbs:** Home > Courses
- Title:** Compare your selections
- Text:** View your other comparisons
- Comparison Grid:**

Course	Rating	Reviews	Price	Length
Google UX Design Professional Certificate	4.5	12 reviews	\$100	1 month
Google UX Design Professional Certificate	4.5	12 reviews	\$100	1 month
Google UX Design Professional Certificate	4.5	12 reviews	\$100	1 month
Google UX Design Professional Certificate	4.5	12 reviews	\$100	1 month
Google UX Design Professional Certificate	4.5	12 reviews	\$100	1 month
- Buttons:** Save my comparison, Print
- Footer:** Contact Business, Contact app, About us, Careers, Contact us, Terms and conditions, Privacy Policy, Accessibility Policy, Help and support, Affiliates, Investors, © 2022 Coursalysis, Inc.

Search Page

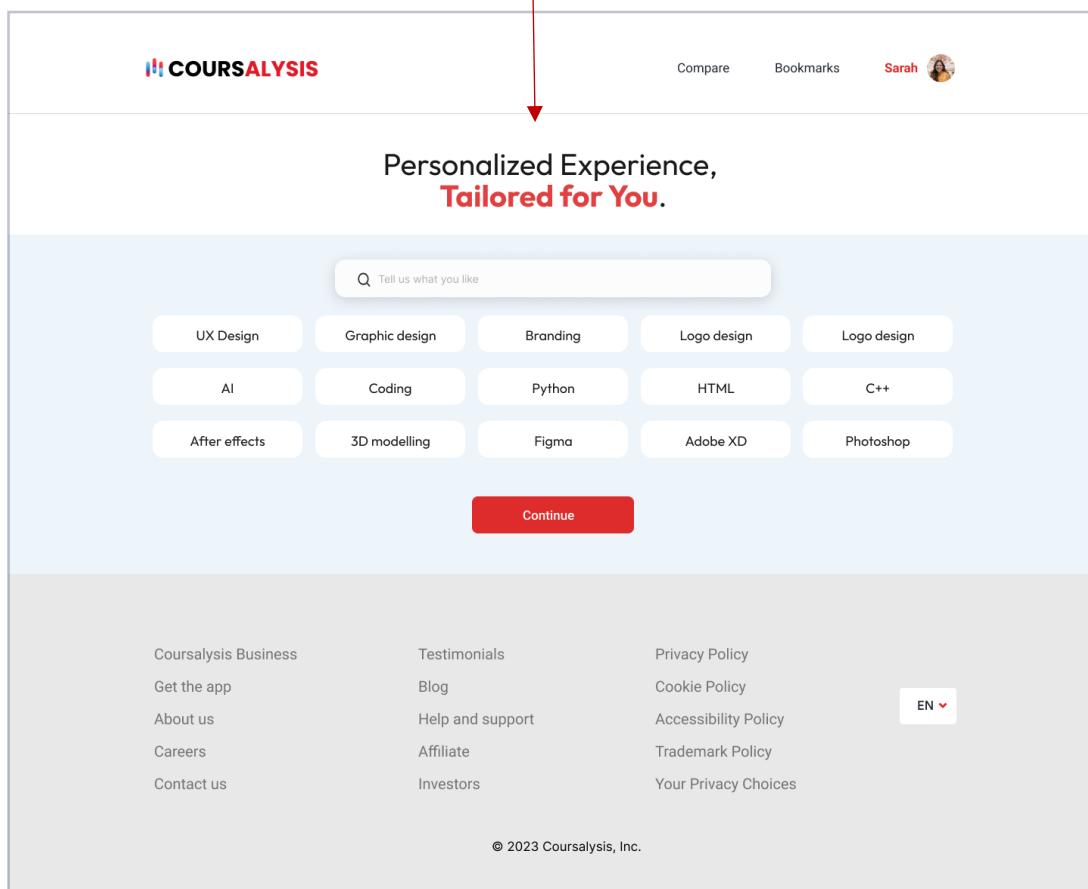
Comparison Page

Figure 4.6: hi-fi prototype of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

Individuals are asked about their preferences after completing the sign-in procedure in order to customise the user experience. This enables the distribution of recommendations according to their preferences.



*Figure 4.7: Personalise screen of Coursalysis created on figma.*

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

A new reward system has been added to an improved website. This involves users accumulating points by doing particular tasks on the platform. Users become eligible for appealing prices and offers on online courses as a result of their point collection after they achieve a certain point level.

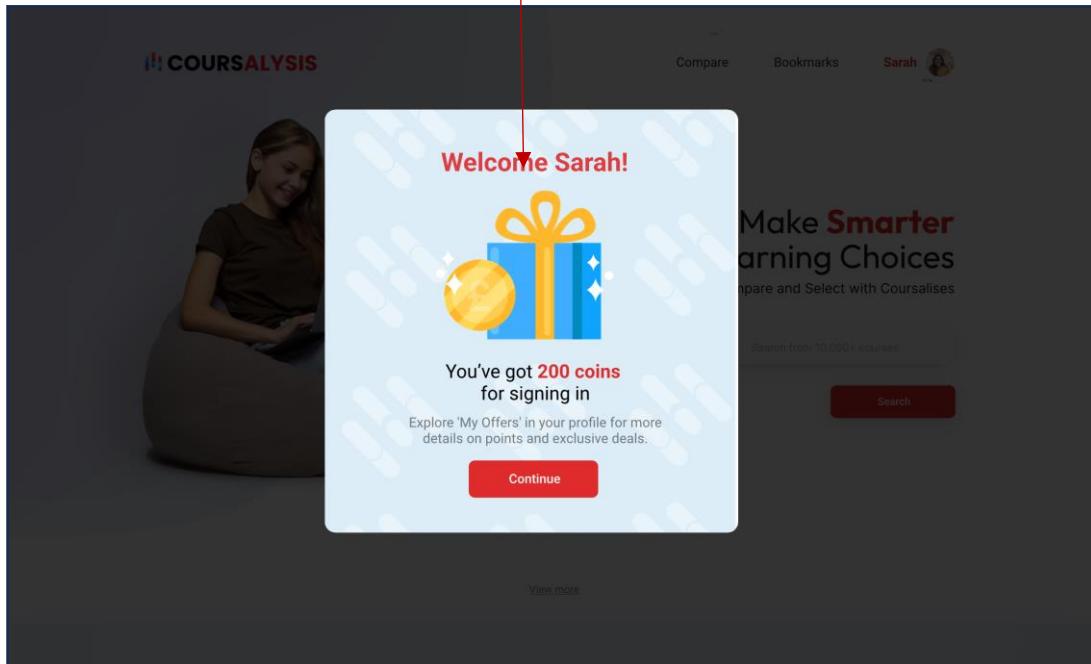
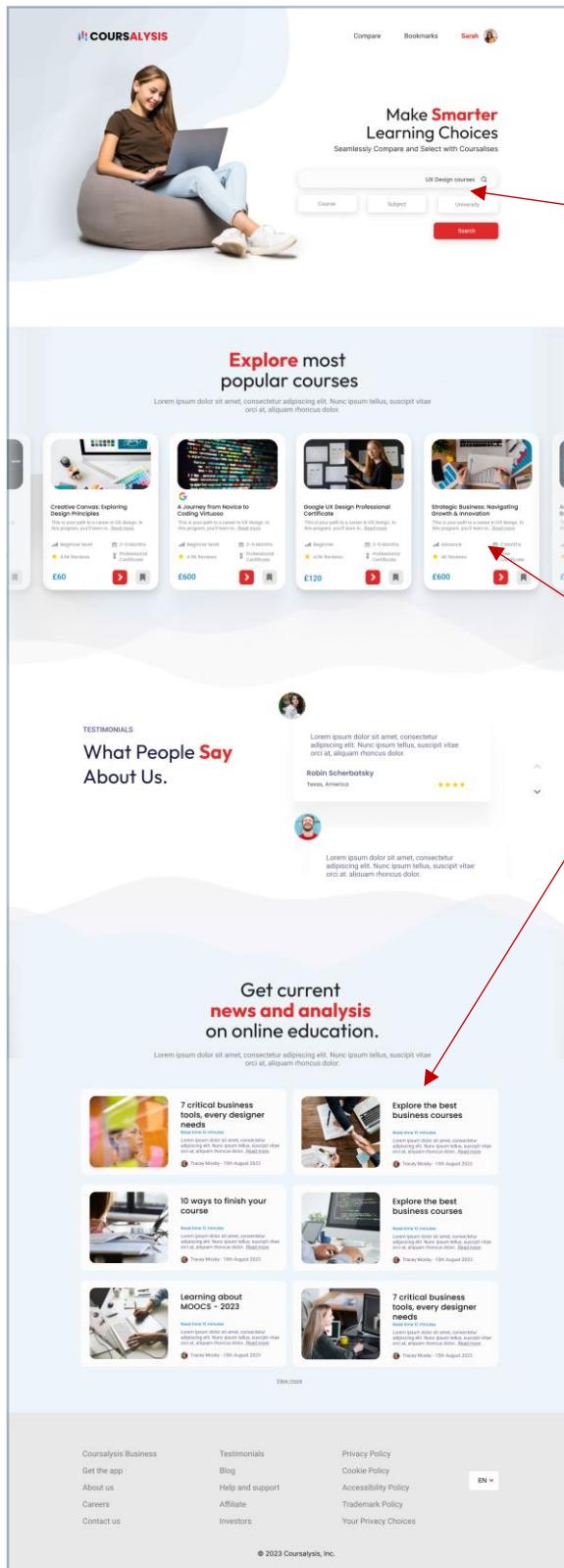


Figure 4.8: Reward screen of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)



A search option has been added to the home screen, allowing users to easily explore their desired courses, subject, and universities.

To give a personalised feel, courses and blogs have been recommended according to user's interests.

Figure 4.9: Home screen of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

The addition of filter and sorting options was implemented to enhance the user's ability to efficiently search and locate their desired courses.

A "Compare" option has been thoughtfully placed within each course listing, allowing users to make strategic decisions about which courses they choose to evaluate. After making their selections, customers may easily launch a full comparison by clicking the "Compare Selected Courses" button.

A bookmark button has been added to each course, so that the user can view the course later. This can also be used as a Wishlist by the user.

Figure 4.10: Search page of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

The screenshot shows the Coursalysis 'Compare' page with four course cards. Each card includes a thumbnail, title, brief description, and a 'See Detail' button.

Affiliation	Google	Google	Google	Google
Platform	Coursera	Udemy	Coursera	Skillshare
Student ratings	★★★★	★★★★	★★★★	★★★★
Level	Beginner	Beginner	Beginner	Beginner
Duration	3-6 Months	3-6 Months	3-6 Months	3-6 Months
Certification	Professional certificate	Professional certificate	Professional certificate	Professional certificate
Mode	Flexible	Flexible	Flexible	Flexible
Skills	Figma, XD, UX Design... See more			
Language	English	English	English	English
Price	£82	£99	£45	£32
Reviews	★★★★	★★★★	★★★★	★★★★

Below the cards, there's a summary table comparing the four courses across various categories like Affiliation, Platform, Student ratings, etc. At the bottom, there's a 'Save this Comparison' button.

Users can include a maximum of four courses in their comparisons and remove courses based on their unique needs and preferences.

Selected courses can be compared together with all their details and offers.

The Comparison can be saved and viewed later if and when needed.

Figure 4.11: Compare page of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

The user can compare courses save in the bookmark section and view course details or use it for comparing.

**Your Bookmarks**

Compare selected courses

1 out of 3 pages >

Course Title	Description	Price	Level	Flexibility	Duration	Certificate
Google UX Design Professional Certificate	This is your path to a career in UX design. In this program, you'll learn in... Read more	£120	Beginner level	Flexible	3-6 Months	Professional Certificate
Google UX Design Professional Certificate	This is your path to a career in UX design. In this program, you'll learn in... Read more	£120	Beginner level	Flexible	3-6 Months	Professional Certificate
Google UX Design Professional Certificate	This is your path to a career in UX design. In this program, you'll learn in... Read more	£120	Beginner level	Flexible	3-6 Months	Professional Certificate
Google UX Design Professional Certificate	This is your path to a career in UX design. In this program, you'll learn in... Read more	£120	Beginner level	Flexible	3-6 Months	Professional Certificate
Google UX Design Professional Certificate	This is your path to a career in UX design. In this program, you'll learn in... Read more	£120	Beginner level	Flexible	3-6 Months	Professional Certificate

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EN ▾

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Figure 4.11: Bookmark page of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)

The screenshot shows a course detail page for the 'Google UX Design Professional Certificate'. At the top, there's a navigation bar with 'COURSALYSIS' and a search bar. Below the header, the breadcrumb path is 'Home > Search result for - UX design courses > Google UX Design Professional Certificate'. The main content area features a large image of a woman in a classroom setting. To the left of the image, the course title 'Google UX Design Professional Certificate' is displayed with a '5k reviews' rating and a 'Compare' button. A red arrow points from the 'Compare' button to the 'Reviews of people' section below. To the right of the image, there's a sidebar with course details: 'Flexible schedule', 'Paid Course', 'English', 'Certificate Available', '26 weeks long, 10 hours a week', 'Beginner', and a price of '£120' with an 'Enroll' button. Another red arrow points from the 'Course brief' section down to the 'View similar courses' section. The 'Course brief' contains several paragraphs of placeholder text. The 'View similar courses' section shows three other course cards with titles like 'User experience course for Beginners' and 'Google UI Design Professional Certificate'. At the bottom of the page, there's a 'Reviews of people' section with three user reviews, each with a small profile picture and a 5-star rating. A red arrow points from the 'Leave your Review' button at the bottom to the 'Leave your Review' section. The footer contains links for 'Coursalysis Business', 'Testimonials', 'Privacy Policy', 'Get the app', 'Blog', 'Cookie Policy', 'About us', 'Help and support', 'Accessibility Policy', 'Careers', 'Affiliate', 'Trademark Policy', 'Contact us', 'Investors', 'Your Privacy Choices', and language selection ('EN'). A copyright notice at the bottom states '© 2023 Coursalysis, Inc.'

Students can track and mark their progress inside each course, providing a useful tool for analysing their educational journey and development.

By clicking the 'enrol' button, users will be taken to the website that offers the course.

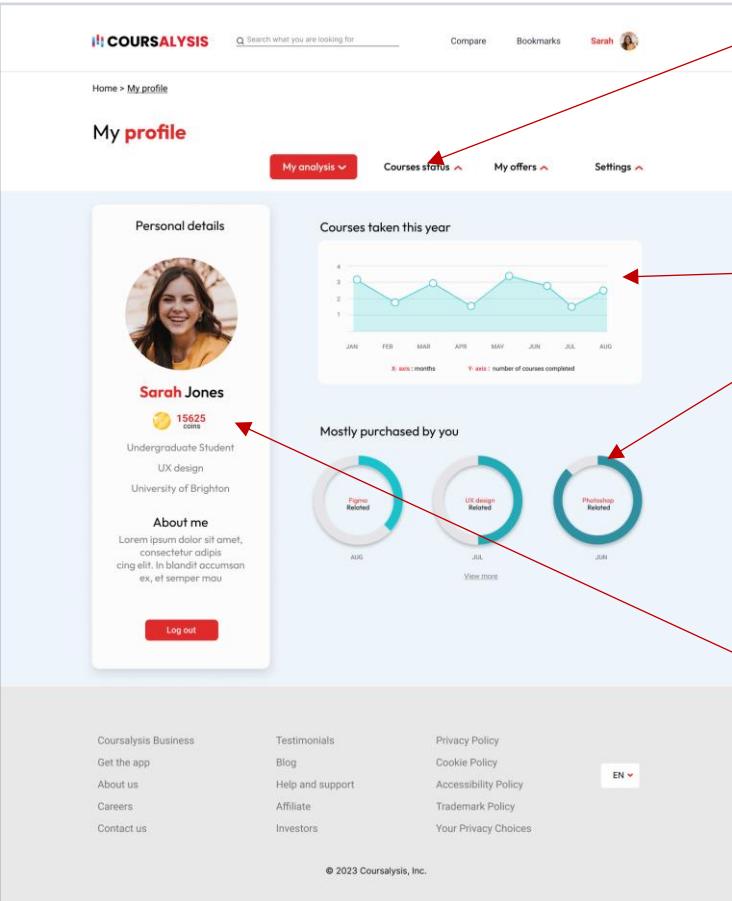
A detailed course description has been given for user convenience. Users can also browse similar courses if they want to view or compare them with the course at hand.

Users can read evaluations made by other students and offer their own reviews for the course, building a dynamic and user-driven learning community.

Figure 4.12: course description page of Coursalysis created on figma.

## Visual Design key screens

The following pages show key screens from Coursalysis website. The prototype can be viewed [here](#)



The screenshot shows the 'My profile' page of Coursalysis. At the top, there's a navigation bar with the Coursalysis logo, a search bar, and user account information for 'Sarah'. Below the header, the main content area is titled 'My profile'. It features a sidebar with 'Personal details' (profile picture of Sarah Jones, 15625 coins, Undergraduate Student, UX design, University of Brighton) and an 'About me' section (with placeholder text). The main content area includes a 'Courses taken this year' chart (line graph showing course completion per month), three circular donut charts ('Mostly purchased by you' for Figma, UX design, and Photoshop), and a summary of 'My offers' (with a red arrow pointing to it). At the bottom, there's a footer with links to various Coursalysis services and a language selection dropdown.

User can view/update their course status

Users can access a historical record of their course progress over the previous months, as well as study other analytics connected to their completed courses, which provide vital insights into their learning experience.

Users may see how much coins they have collected so far, as well as the offers and promotions they have received in the 'my offers'

Figure 4.13: My profile page of Coursalysis created on figma.

# Testing

Prior to deciding on the final assessment methods for the Coursalysis, it was important to analyse several data evaluation methodologies. The following information analyses the unique aspects of the Coursalysis, examines numerous assessment methods that were considered for formative and summative usability evaluations, and provides reasoning for selecting the specific methodologies. Possible evaluation techniques

The following methodologies were investigated for formative and summative usability testing.

## Task and severity

The Tasks and Severity survey was the first evaluation method explored. Severity ratings can be used to decide where extra usability efforts should be directed and how much money should be spent on resolving the most significant issues. If the severity ratings demonstrate that an interface still has a number of major usability concerns, it is unlikely to be released (Nielsen, 1994).

A 0-4 grading scale is used to assess the degree of usability concerns. The first severity level represents the most serious difficulties, while the last represents the least serious. Kallio et al. (2004) categorise issue intensity into three categories: high (failure in task execution), medium (not so severe, task may be completed), and low (minor problems) (Kaikkonen et al., 2006).

Although task severity is an important component of usability testing, it can be difficult to define and scope task severity levels exactly and consistently. If task severity levels are not clearly understood, the usefulness and trustworthiness of usability testing results may suffer.

## SUS

The SUS questionnaire was a different evaluation method that was taken into account. For testing usability, the System Usability Scale (SUS) offers a "quick and dirty" but trustworthy method. It comprises of a 10-item questionnaire with five possible responses—Strongly agree to Strongly disagree—given to respondents. John Brooke first came up with it in 1986 (usability.gov, 2019).

SUS scores and people's evaluations of the systems and goods they were evaluating in terms of adjectives like "good," "poor," or "excellent" were shown to be closely correlated by Bangor, Kortum, and Miller. They suggested that it could be possible to convert a product's SUS score (UserExperienceMagazine, 2013).

One disadvantage of the System Usability Scale (SUS) is its potential vulnerability to response biases. Participants commonly had passive response biases, which occurred when they simply

agreed with the SUS's arguments without much thought. This bias necessitates caution when interpreting scale scores since it may impair the validity and reliability of the SUS results.

### ISO metrics

The ISO Metrics of Gediga et al. were also considered for Coursalysis. The ISO metrics are a set of uniform measures for evaluating software quality, taking into account variables such as usability, maintainability, reliability, and efficiency.

These metrics provide a rigorous and unbiased way to analyse software systems (Justin Mifsud, 2018). The ISO measure can enhance Coursalysis user testing by decreasing subjective bias and enabling for more reliable and consistent evaluation. However, it may fail to properly capture the app's unique environment and specialised requirements, potentially limiting its applicability.

### SUMI Questionnaire

The SUMI Questionnaire was also considered. The SUMI is a 50-item survey that assesses the success of a system in terms of efficiency, affect, helpfulness, control, and learnability. The SUMI is quite reliable.

Using the SUMI questionnaire, you may compare Coursalysis to other similar websites. This can be used to compare the usability of Coursalysis to that of other systems and, using comparative data, to identify areas for improvement. However, it may not collect specific information about the interaction process. It may be able to provide specific insights.

### Product reaction cards

For the user testing of Coursalysis, a product reaction card was also examined. Product reaction cards were created by Microsoft as part of a "desirability toolkit" meant to understand the elusive, intangible feature of desirability resulting from a user's engagement with a product. However, product reaction cards emphasise customers' initial impressions and feelings rather than how they used Coursalysis. They may be unable to accurately capture specific task performance, navigational issues, or usability concerns that arise during user interactions.

### Eye tracking

The only technique considered for Coursalysis that does not require participants to fill out forms was eye tracking. Eye tracking provides precise data on users' gaze patterns, allowing for a complete assessment of where users focus their attention while using the Coursalysis. This data can identify usability issues, highlight areas of interest, and guide design improvements. Unlike the other evaluation methods considered, this method can be costly and reliant on technological equipment (Garcia, 2013).

## Chosen evaluation techniques.

### Formative Testing

During the formative testing of the mid-fi of Coursalysis, two methods were chosen to acquire meaningful data. The Tasks and Severity survey was used first to rank the relevance and complexity of certain user tasks, allowing testing to be prioritised and targeted. Second, to determine whether the website served its goal, the System Usability Scale (SUS) was used to assess how usable users perceived the website to be. All these tasks were done while the user was performing talk aloud. These methodologies, when combined, provided a detailed understanding of the Coursalysis's usability difficulties and early reactions.

### Summative testing

During the summative testing phase of the high- fi of Coursalysis, the Task and severity and SUS was used along with talk aloud. This enabled us to undertake a more systematic and definitive evaluation of the website's usability and user experience. The Tasks and Severity survey helped determine the effectiveness and significance of user tasks, whereas the SUS provided a standardised indicator of overall usability. These methodologies were utilised in summative testing to obtain a full review of the usability and user experience of the Coursalysis.

## Formative Test and Evaluation

Two methods of testing and evaluation techniques were chosen for this study after numerous were taken into consideration. They are put into practise as follows.

### Tasks and Severity

The task and severity questionnaire, adapted from Jakob Nielson, consisted of five tasks. Each activity required a severity rating, with possibilities ranging from minimal difficulty to usability disaster. The entire survey was made available as an editable PDF in the appendix and was graded using the equation below.

$$100 - \left( \frac{100 (P1 + P2 + P3 + P4)}{45} \right) = \text{Percentage Score}$$

### SUS

The SUS questionnaire, which consisted of ten items (both positive and negative on a 5-point scale), was adapted from John Brooke's research. The following equations were used to assess the entire questionnaire, which was provided in the form of an editable PDF in the appendix.

$$2.5((\text{Odditem}-1)+(5-\text{Evenitem}))=\text{Px} \quad \left| \quad \frac{(\text{P1}+\text{P2}+\text{P3}+\text{P4})}{4} = \text{Percentage Score} \right.$$

## Formative Data analysis and participants

The data supplied represents the results of usability testing for Coursalysis's MID-FI prototype. The test included ten participants, mostly university students and working people who frequently engage in online learning. These people were chosen from among those who responded to the survey and took part in one-on-one interview. The primary goal was to determine whether the website met their requirements and to make any necessary changes. The participants were assigned certain tasks on the mid-fi prototype, and their feedback on tasks, severity of issues, and the System Usability Scale (SUS) was gathered.

<b>Question 1:</b>	1	0	4	1	3	2	2	3	-	4
<b>Question 2:</b>	-	0	4	1	5	2	1	3	-	4
<b>Question 3:</b>	1	0	5	1	4	2		3	-	4
<b>Question 4:</b>	-	0	6	1	4	2	-	3	-	4
<b>Question 5:</b>	-	0	8	1	2	2	-	3	-	4

Average score percentage = **71.2%**

<b>Question 1:</b>		1		2	4	3	3	4	3	5
<b>*Question 2:</b>	5	1	4	2	1	3		4		5
<b>Question 3:</b>		1		2	4	3	4	4	2	5
<b>*Question 4:</b>	4	1	4	2	2	3		4		5
<b>Question 5:</b>		1		2	3	3	5	4	2	5
<b>*Question 6:</b>	3	1	6	2	1	3		4		5
<b>Question 7:</b>		1		2	2	3	5	4	3	5
<b>*Question 8:</b>	5	1	1	2	3	3		4		5
<b>Question 9:</b>		1		2	2	3	5	4	3	5
<b>*Question 10:</b>	3	1	6	2	1	3		4		5

Average score percentage = **76.75%**

### Formative Recommendations

Based on findings from talk-aloud sessions and survey answers, it was clear that users appreciated the idea of a course comparison website. They were very pleased with the platform's availability of personalised course recommendations. Furthermore, the introduction of gamification features to allow users to earn course-related offers was well-received. This gamification feature not only encouraged users to return to the website, but it also urged them to finish their courses. Below are the amended recommendations targeted at improving the visual layout and structure of Coursalysis:

**Onboarding Screen:** It is recommended that the "skip" option be removed from the onboarding screen. Allowing consumers to make active choices corresponds with their tastes and promotes a more engaging start.

**Home Screen:** To simplify user interactions, the selections for courses, subjects, and universities should be made available only after the user has put their search query into the search field.

Consider personalising the navigation bar with the user's name rather than labelling it "My Profile." By including a search button in the navigation bar on all pages, users can easily search from anywhere on the site.

**My Profile:** Improve the user profile by displaying the user's acquired cash beneath the user's image. This makes the profile experience more gamified.

**Search page:** Include course offers within the course description on the search page to help users make decisions. Furthermore, putting quantitative indicators on filter options assists users in determining the available course count when picking a filter.

**Page describing the course:** Replace the "People Who Have Also Viewed" area with "View Similar Courses" to make comparing relevant courses easier. Displaying user ratings clearly at the top provides useful information.

When users click "Enroll," a notification should appear informing them that they have been forwarded for enrolment.

**Page Comparison:** Add a feature that allows users to retrieve saved comparisons.

Limiting course comparisons to a limit of four per session keeps consumers from becoming overwhelmed and preserves clarity.

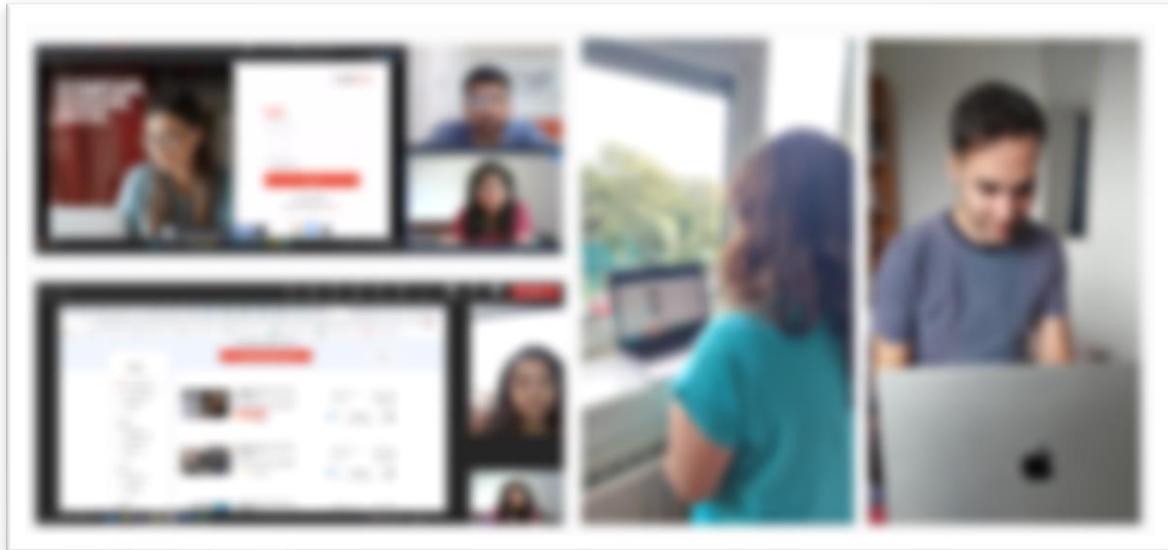
#### **Overall Recommendations:**

The majority of users were pleased with the website, despite the restrictions of mid-fi prototyping. Overall, the quantitative number acquired from task and severity and SUS resonates with the qualitative feedback received from the users.

## **Summative Test and Evaluation**

Following the completion of the website's hi-fi prototype phase, a summative testing process was carried out online and face-to-face to assess the level of progress made. The usage of the same tests was done to ensure a thorough examination and to acquire important user input. This phase of testing was carried out by the same group of people who had previously

participated in formative testing. This method enabled a direct comparison of the final scores received from formative and summative testing efforts.



*Figure 5.1: Users doing summative testing while doing talk aloud*

<b>Question 1:</b>	5	0	6	1		2		3	-	4
<b>Question 2:</b>	4	0	5	1	1	2		3	-	4
<b>Question 3:</b>	5	0	4	1	1	2		3	-	4
<b>Question 4:</b>	3	0	5	1	2	2	-	3	-	4
<b>Question 5:</b>	6	0	4	1		2	-	3	-	4

Average score percentage = **87.2%**

<b>Question 1:</b>	1	2	3	5	4	5	5		
<b>*Question 2:</b>	6	1	4	2	3	4	5		
<b>Question 3:</b>		1	2	3	6	4	5		
<b>*Question 4:</b>	7	1	2	2	1	3	4	5	
<b>Question 5:</b>		1	2	2	3	5	4	3	5
<b>*Question 6:</b>	8	1	2	2	3	4		5	
<b>Question 7:</b>		1	2	3	3	4	7	5	
<b>*Question 8:</b>	8	1	2	2	3	4		5	
<b>Question 9:</b>		1	2	2	3	4	4	5	
<b>*Question 10:</b>	8	1	2	2	3	4		5	

Average score percentage = **86.05%**

## Final recommendations

The following section outlines recommendations derived from the summative testing and evaluation conducted on the Coursalysis. Coursalysis can further enhance its user experience, improve the website's visual appeal and organization, and ensure ongoing development aligns with user expectations and needs.

## Visual Design

### Standard feedback

The high-fidelity prototype of Coursalysis received favourable feedback for its ideal performance, simple interface, and intuitive navigation as well as compared to the mid-fi prototype in both the test. However, there are some areas where improvement is possible to improve the user experience. Users contributed useful suggestions, such as increasing the line spacing on the comparison page. It was also suggested that a "Compare All Courses" option be added at the end of the page as to both the search and bookmark pages. To improve visual consistency and coherence, establish uniformity in button design, which will improve their visibility. As observed the qualitative feedback of the hi-fi prototype was more as compared

to the mid-fi prototype, which proves that the majority of issues they found in the formative testing was resolved.

### **Additional Testing**

An additional round of evaluation testing for Coursalysis's enhanced hi-fi prototype can be done to improve the website further. Using different user testing methodologies such as the product reaction card, cognitive walkthrough, and eye tracking approach in conjunction with this can offer more thorough insights from users, adding to future changes.

It is advised that the chosen colour scheme be subjected to colour blindness tests to guarantee optimal readability and accessibility for individuals with varied degrees of visual impairment. This proactive step will ensure that the colours chosen are accessible and create an inclusive user experience.

### **Future recommendations**

- Introduce a tool that maps course skills to specific employment requirements, assisting users in understanding the practical applicability of the knowledge received.
- Create a targeted mobile app that provides users with an optimised experience when exploring and comparing courses on their smartphones.
- Encourage users to participate in study groups or forums where they may interact, ask questions, and exchange thoughts about certain courses. This promotes a sense of belonging and peer support.
- Although it is still in the prototype stage, the website has the potential to be responsive across multiple devices.

## Personal reflection

With 4 years of design experience and working in a marketing agency where everything is so fast paced, I had the privilege of conducting a dissertation that delved deeply into the challenges faced by potential learners when navigating the vast landscape of Massive Open Online Courses (MOOCs) websites during the course of my major project. My research focused on the prevalent issue of choice overload, which affects users who are confronted with an excessive quantity of options.

I embarked on this trip with a burning desire to understand the underlying causes of the challenges learners had while looking for suitable online courses. I understood the need of not only recognising these issues but also developing a comprehensive solution that may improve the overall user experience. To accomplish this, I adopted the design thinking approach as a guide.

I never had the opportunity to consider how crucial the earliest stages are. Learning about the design thinking process and all of the steps in this subject has significantly broadened my perspective on how to formulate a problem statement and then focus on addressing it. With its fundamental concepts of empathy, definition, ideation, prototype, and testing, the design thinking approach provided me with a disciplined framework for analysing the problem holistically. I was determined not only to focus light on the difficulties that potential learners experienced, but also to create a real solution that would alleviate their frustrations.

I engaged deeply with potential learners throughout the research phase, empathically understanding their pain spots and worries. This step was critical in laying a solid basis for the following stages. I was able to hone in on the issue of choice overload as the cornerstone of the user experience challenge by identifying and limiting the breadth of the problem.

The ideation phase was defined by creative brainstorming and the creating of unique solutions to the choice overload problem. I drew several ideas, but one in particular stood out: a complete comparison website that would enable consumers to make informed selections regarding MOOCs by showing courses side by side. Coursalysis has the potential to solve some major issues that were found during the empathise phase.

The prototyping phase began with this concept in mind. I created an interactive website prototype using multiple design tools. This prototype sought to simplify the course comparison process by using easy filters, brief course information, and user reviews. Because prototyping is iterative, I was able to fine-tune the design in response to user feedback, which was a vital step in the solution's progress.

My efforts culminated in the creation of a functional website aimed to assist users in successfully comparing online courses. The user interface was carefully designed to strike a balance between visual appeal and practical efficiency. To help learners through the decision-

making process, I integrated user-centric elements such as personalised recommendations and a simpler rating system.

I am certain that this website, founded on empathy and precisely constructed, has the potential to dramatically improve the user experience for potential MOOC learners dealing with the complications of choice overload. I would personally like to work on this project further and develop it after a more in-depth study of business and technical knowledge.

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## App Prototype Images and Icons

The high-fidelity prototype's photos and icons were all used using free and editable licences. Those photos come from:

Freepik (2019). Freepik - Free Graphic resources for everyone. [online] Freepik.  
Available at: <https://www.freepik.com/>.

Flaticon (2010). Flaticon, the largest database of free vector icons. [online] Flaticon.  
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## Appendix

### System Usability Scale

The questionnaire below is a SUS form that will offer feedback on the platform you just evaluated. Please choose the option that best represents your experience for each question.

1. I think that I would like to use this system frequently.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. I found the system unnecessarily complex.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. I thought the system was easy to use.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. I think that I would need the support of a technical person to be able to use this system.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. I found the various functions in this system were well integrated.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. I thought there was too much inconsistency in this system.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. I would imagine that most people would learn to use this system very quickly.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

8. I found the system very cumbersome to use.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. I felt very confident using the system.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. I needed to learn a lot of things before I could get going with this system.

1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Task and severity

The following questionnaire has a list of 4 tasks. After completing tasks, please select one rating that best describes your experience

Task-1: Sign up on the website and personalise it

Task-2: Find a course which is flexible, >£100, provides free certification.

Task-3: Select and compare 4 courses

Task-4: Bookmark a course to view

Task-5: enrol to a course

The severity of this evaluation states :

- 0 - I don't agree that this is a usability problem at all
- 1 - Cosmetic problem only: need not be fixed unless extra time is available on project
- 2 - Minor usability problem: fixing this should be given low priority
- 3 - Major usability problem: important to fix, so should be given high priority
- 4- Usability catastrophe: imperative to fix this before product can be released

Task-1: Sign up on the website and personalise it

<input type="checkbox"/>	0 = I don't agree that this is a usability problem at all.
<input type="checkbox"/>	1 = Cosmetic problem only: need not be fixed unless extra time is available on project.
<input type="checkbox"/>	2 = Minor usability problem: fixing this should be given low priority.
<input type="checkbox"/>	3 = Major usability problem: important to fix, so should be given high priority.
<input type="checkbox"/>	4 = Usability catastrophe: imperative to fix this before product can be released.

Task-2: Find a course which is flexible, >£100, provides free certification.

<input type="checkbox"/>	0 = I don't agree that this is a usability problem at all.
<input type="checkbox"/>	1 = Cosmetic problem only: need not be fixed unless extra time is available on project.
<input type="checkbox"/>	2 = Minor usability problem: fixing this should be given low priority.
<input type="checkbox"/>	3 = Major usability problem: important to fix, so should be given high priority.
<input type="checkbox"/>	4 = Usability catastrophe: imperative to fix this before product can be released.

### Task-3: Select and compare 4 courses

<input type="checkbox"/>	0 = I don't agree that this is a usability problem at all.
<input type="checkbox"/>	1 = Cosmetic problem only: need not be fixed unless extra time is available on project.
<input type="checkbox"/>	2 = Minor usability problem: fixing this should be given low priority.
<input type="checkbox"/>	3 = Major usability problem: important to fix, so should be given high priority.
<input type="checkbox"/>	4 = Usability catastrophe: imperative to fix this before product can be released.

### Task-4: Bookmark a course to view.

<input type="checkbox"/>	0 = I don't agree that this is a usability problem at all.
<input type="checkbox"/>	1 = Cosmetic problem only: need not be fixed unless extra time is available on project.
<input type="checkbox"/>	2 = Minor usability problem: fixing this should be given low priority.
<input type="checkbox"/>	3 = Major usability problem: important to fix, so should be given high priority.
<input type="checkbox"/>	4 = Usability catastrophe: imperative to fix this before product can be released.

### Task-4: Bookmark a course to view.

<input type="checkbox"/>	0 = I don't agree that this is a usability problem at all.
<input type="checkbox"/>	1 = Cosmetic problem only: need not be fixed unless extra time is available on project.
<input type="checkbox"/>	2 = Minor usability problem: fixing this should be given low priority.
<input type="checkbox"/>	3 = Major usability problem: important to fix, so should be given high priority.
<input type="checkbox"/>	4 = Usability catastrophe: imperative to fix this before product can be released.

## Brief Instructions

Hello!

I appreciate you taking part. It should take you 20 to 30 minutes to finish this survey. Please adhere to the directions below:

Step 1: Read through and complete the participant consent form found in the PDF attachment.

Step 2: View the redesigned prototype on figma

link :

<https://www.figma.com/file/BGwdJBCFitJ38qq0gw2s3D/Coursalises?type=design&node-id=0%3A1&mode=design&t=Yd1tkyCW60Xofeig-1>

Step 3: while viewing the app it is requested that you talk out loud and give feedbacks

Step 4: After reviewing the app, please proceed to fill out the other sections of this survey as completely as you can. For ease of comprehension and completion, it is advised that you answer the survey questions in order.



# University of Brighton

## Participation Information Sheet Template –Student Projects

**Title of Project:** Course comparison platform

**Purpose of the project:** Understanding the difficulties that potential learners face when looking for online courses and developing a solution to improve their usability.

### Why have I been invited to participate?

You have been invited to take part in this research because it will help inform my student project.

### Do I have to take part?

Taking part is entirely voluntary and you may withdraw at any point.

### What are the potential benefits of taking part?

The potential to support and inform an IDM90 master's project is one of the benefits of participating.

### Will my taking part in the study/project be kept confidential?

Yes. All data collected for this project will be anonymous and no identifying data will be collected or used. If you are taking part in a focus group then you must treat as confidential any comments made by other members of the group and not disclose them to anyone outside the group. If focus groups are recorded (audio or video) the resulting media will be uploaded to the University of Brighton's OneDrive storage area and any copies on audio or video equipment will be deleted once the upload is complete. Any transcribing of these recordings will be done by the student managing the project. When the project has been marked and processed by the relevant exam boards the uploaded recordings will be deleted. Consent forms will be handed to the project supervisor and stored in a locked cabinet until no longer needed.

### What will happen if I don't want to carry on with the study?

You may withdraw from this project at any time. It may not be possible to remove any survey data you have contributed as this will have been collected anonymously and so identification of your data will not be viable. Similarly, for focus groups all contributions will be anonymous and integrated with other participants' data so it will not be possible to identify and remove your data.

### What will happen to the results of the project?

This project's outcomes will be documented and shared with examiners for evaluation and quality assurance. Once completed, I would be pleased to share this report with you.

### Contact details

[s.prasad3@uni.brighton.ac.uk](mailto:s.prasad3@uni.brighton.ac.uk)

### What if I have a question or concern?

If you have any questions or concerns about the project, please contact my module leader (student to include name and university email address of module leader). You may also contact the Ethics Panel Chair for the School of Computing, Engineering and Mathematics, Anya Belz if you have any concerns or questions. Her email is [A.S.Belz@Brighton.ac.uk](mailto:A.S.Belz@Brighton.ac.uk)

## Participant consent form

**Project title:** Course comparison platform

**Name of researcher:** Shailaja Prasad

I have read and understood the information sheet for the above study and have had the opportunity to consider the information and ask questions.	<input checked="" type="checkbox"/>
The researcher has explained to my satisfaction the purpose, principles and procedures of the study and any possible risks involved.	<input checked="" type="checkbox"/>
I am aware that I will be required to take part in (tick relevant box):	
A focus groups.	
A usability test.	<input checked="" type="checkbox"/>
I understand that my participation is voluntary and that I am free to withdraw from the study at any time without giving a reason and without incurring consequences from doing so.	<input checked="" type="checkbox"/>
I understand how the data collected will be used, and that any confidential information will normally be seen only by the researchers and will not be revealed to anyone else.	<input checked="" type="checkbox"/>
I consent to the focus group being recorded ( <b>STUDENT TO INCLUDE OR DELETE THIS FIELD AS APPROPRIATE</b> )	<input checked="" type="checkbox"/>
I agree to take part in the above study.	<input checked="" type="checkbox"/>

.....  
**Name of participant, Date, Signature**

Shailaja Prasad      20/07/2023

.....  
**Name Researcher, Date**

## Participant consent form

**Project title:** Course comparison platform

Name of researcher: Shailaja Prasad

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Date: 20/07/2023

**Name of participant, Date, Signature**

Shailaja Prasad 20/07/2023 .....

**Name Researcher, Date**

Participant consent form

**Project title:** Course comparison platform

**Name of researcher:** Shailaja Prasad

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**Name of participant, Date, Signature**

Shailaja Prasad      20/07/2023

**Name Researcher, Date**

**Project title:** Course comparison platform

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Shailaja Prasad      20/07/2023

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Participant consent form

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Shailaja Prasad      20/07/2023

**Name Researcher, Date**

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Shailaja Prasad      20/07/2023

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Shailaja Prasad      20/07/2023

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Name Researcher, Date

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**Name of participant, Date, Signature**

Shailaja Prasad      20/07/2023

.....  
**Name Researcher, Date**

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**Name of participant, Date, Signature**

Shailaja Prasad      20/07/2023

.....  
**Name Researcher, Date**

Participant consent form

**Project title:** Course comparison platform

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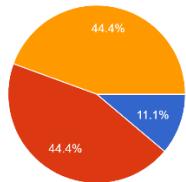
**Name of participant, Date, Signature**

Shailaja Prasad      20/07/2023

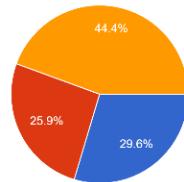
.....  
**Name Researcher, Date**

## Survey analysis

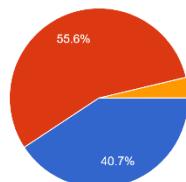
Please select the category that best represents your age:  
27 responses



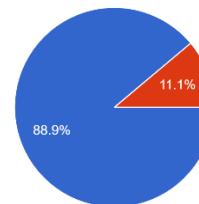
Please specify your highest level of education  
27 responses



Current status:  
27 responses



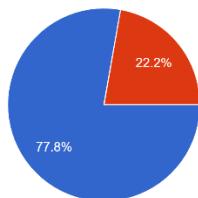
Have you ever taken an online course before?  
27 responses



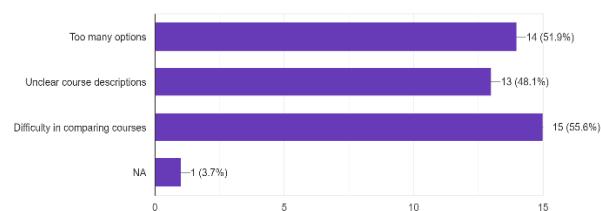
● Yes

● No

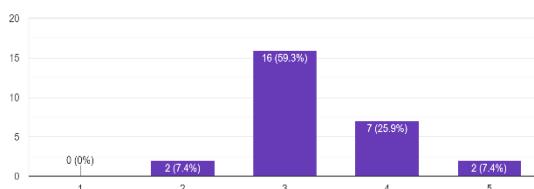
Have you encountered challenges while selecting an online course?  
27 responses



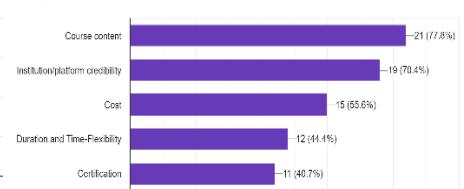
Which aspect of online course selection do you find most challenging?  
27 responses



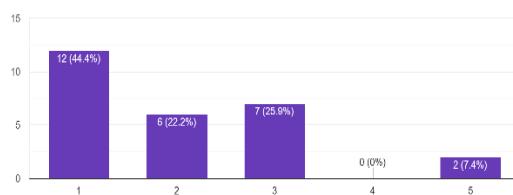
How confident are you in navigating different online course platforms?  
27 responses



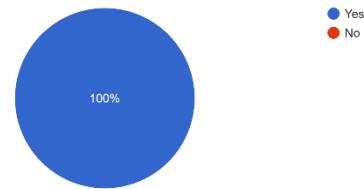
What are your priorities when choosing an online course?  
27 responses



Do you consider the credibility of the institution/platform offering the course important?  
27 responses



Would you find value in a platform allowing you to compare courses?  
27 responses



27 responses

Some courses are not very easy to navigate through and therefore unlikely to finish the course so an easy and intuitive UI/UX might help a lot

The platform can have a multiple compare feature which pans out all important details of the shortlisted courses for the student to easily compare and choose what they wish to go ahead with. It can also have a form which asks the user questions about their preferences in choosing a course basis which the platform can suggest them course which match with their preferences and makes the process of choosing a course much easier and quicker.

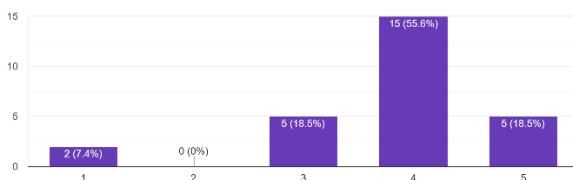
Nothing specific atm

None that comes to mind

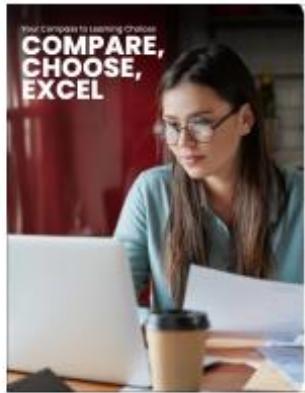
Yes there should be a clear description of what the course is offering also while searching for videos, thumbnails should also have clear visuals

- a standard course breakdown
- profile of people who have already taken the course

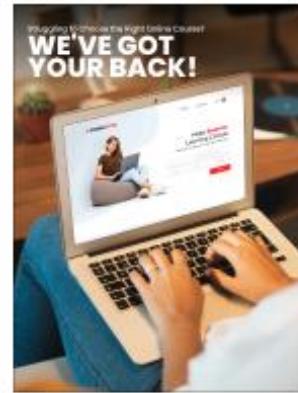
Would reviews and ratings from previous learners influence your course selection?  
27 responses



## Screens of Coursalysis



Login Page



Sign Up Page

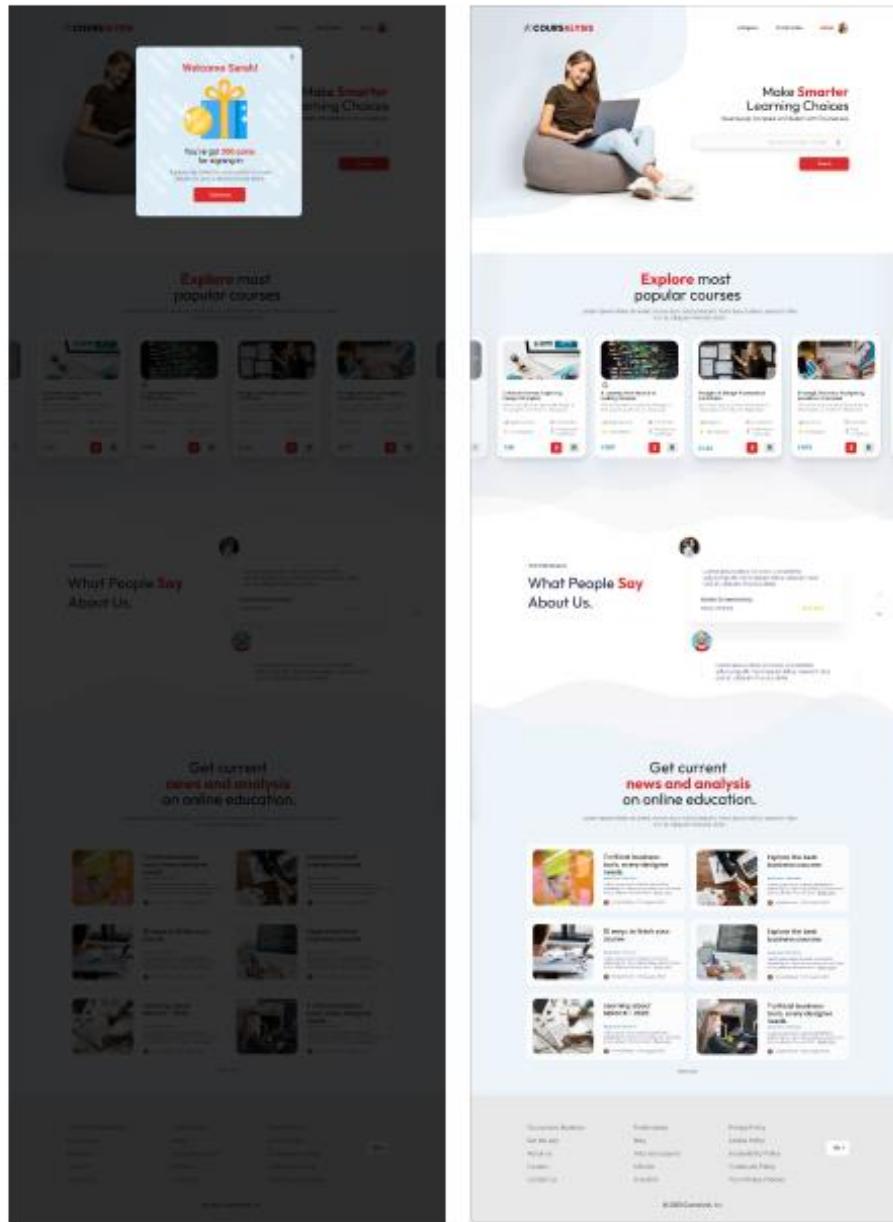
The screenshot shows a 'Personalized Experience, Tailored for You.' page. At the top, there's a search bar and a 'Get Started' button. Below it, there are five categories with preview images: 'Logo Design', 'Graphic Design', 'Branding', 'Logo Design', and 'Logo Design'. Under each category, there are two options: 'After Effects' and 'Blender'. At the bottom, there are links for 'Create Business', 'Get the app', 'About us', 'Careers', and 'Contact us', along with a copyright notice: '© 2023 Coursalysis Inc.'

This screenshot shows the same 'Personalized Experience, Tailored for You.' page as the previous one, but with a different set of preview images under the 'Logo Design' category. The other sections and footer links are identical to the first screenshot.

Personalisation Pages

**Search Page**

**Comparison Page**



Reward Pop Up

Home Screen

This page is intentionally left blank.

Course Detail Page

[View Courses](#)

## Your Bookmarks

Display search results

Thumbnail	Title	Description	Category	Rating	Actions
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
	Google Sheets Intermediate	Learn how to use Google Sheets effectively for data analysis and presentation.	Business	4.5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

[Create a new bookmark](#)

Course categories

- Business & Economics
- Technology
- Arts & Culture
- Health & Well-being
- Science & Nature
- History & Society

Recent activity

Category	Activity	Date
Business	Completed	2 hours ago
Technology	Completed	3 hours ago
Arts & Culture	Completed	4 hours ago
Health & Well-being	Completed	5 hours ago
Science & Nature	Completed	6 hours ago
History & Society	Completed	7 hours ago

[View all recent activity](#)

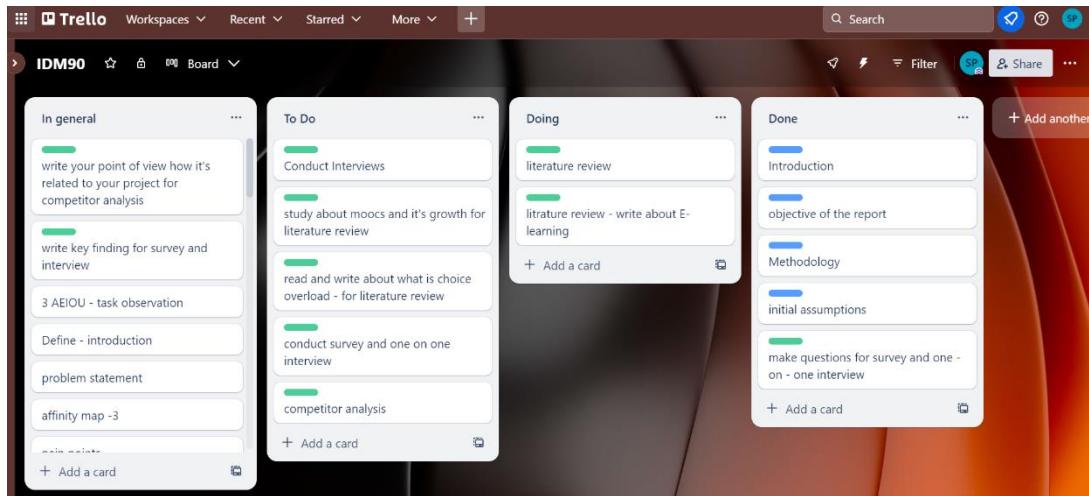
## Enroll Pop-Up

**Add More Than 4 Pop -Up**

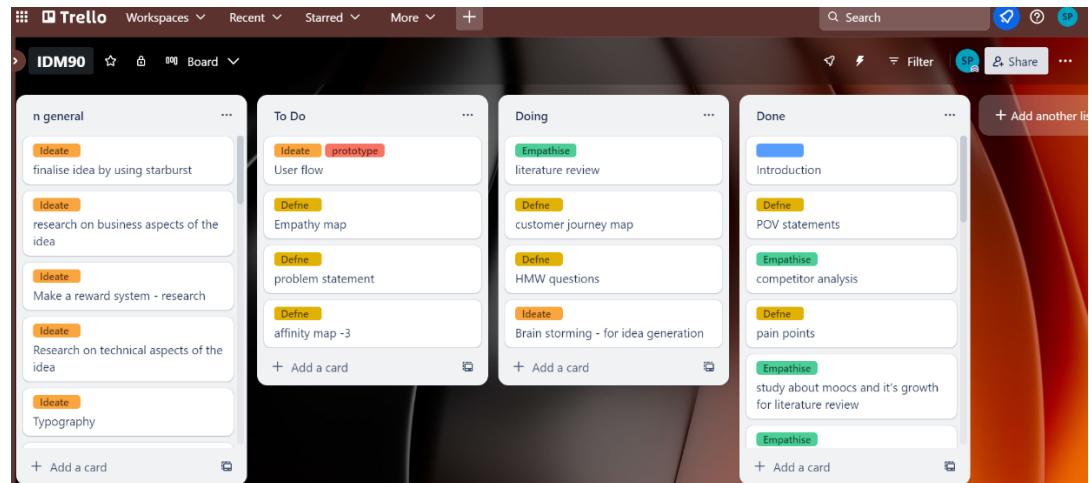
**Comparison Saved Pop Up**

## Trello screens

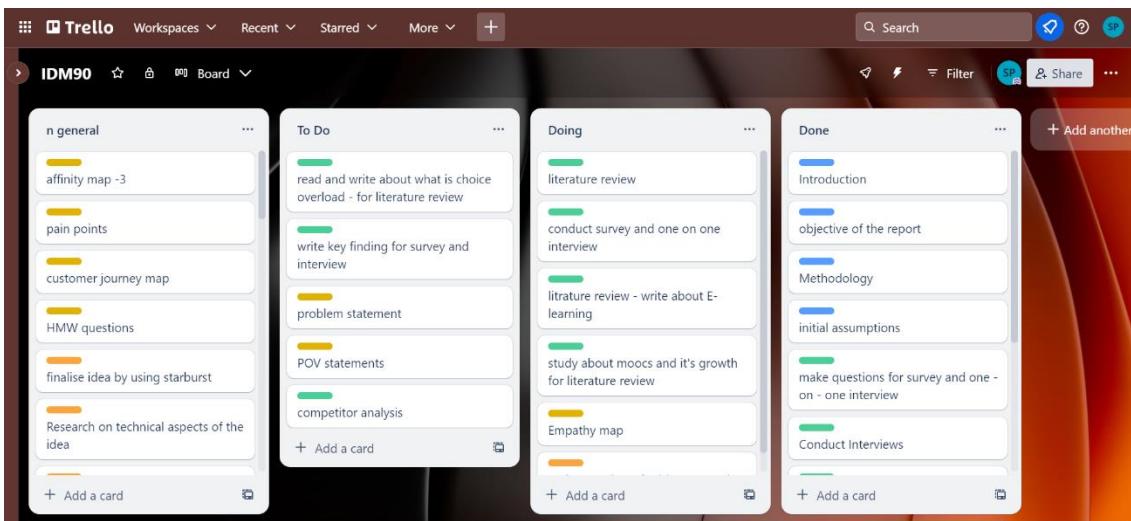
Taken on – 10<sup>th</sup> July 2023



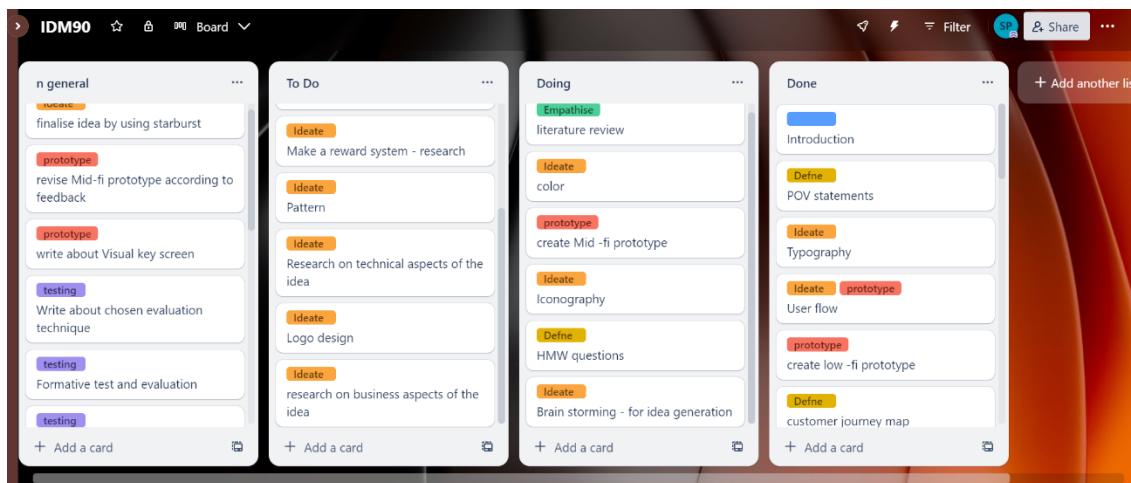
Taken on – 22<sup>th</sup> July 2023



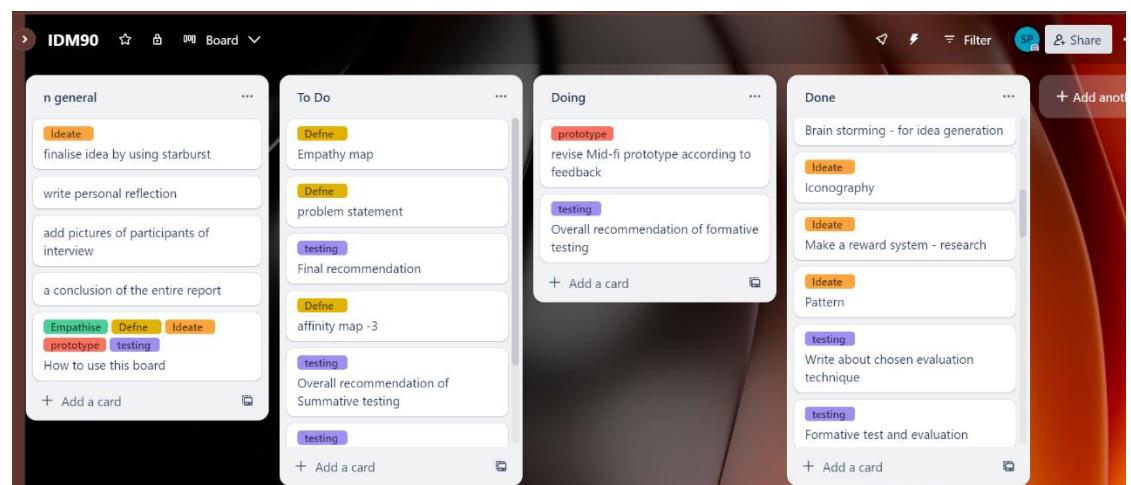
Taken on – 14<sup>th</sup> August 2023



Taken on – 19<sup>th</sup> August 2023



Taken on – 24<sup>th</sup> August 2023



## Questions asked in one- on – one interview

Hello, and thank you for taking the time to participate in this interview. My name is Shailaja Prasad, and I'm a University of Brighton UX Design Masters student. As part of my research, I'm looking into the user experience of people looking for online courses. Your insights are crucial in assisting us in understanding the difficulties that users have and how we can enhance the process. Your feedback will directly help to the development of more user-friendly platforms for online course selection.

Before we begin, I want to secure your privacy and comfort. This interview will be taped purely for research purposes, and your name will be kept private. Your open replies will be extremely beneficial to our research. If you are uncomfortable with a question or desire to stop the recording, please let us know.

- Hi, can you please introduce yourself?
- Are you familiar with online courses?
- Have you done any online courses before?
- What websites have you used before?
- Can you describe a typical process when you decide to enrol in an online course?
- What factors do you consider?
- Could you share any specific challenges you have faced while trying to select an online course in the past?
- How did you eventually decide?
- Have you ever wanted a more personalised approach to find online courses?
- Could you elaborate on what you'd expect?
- How open are you in adopting a new tool that helps you while selecting courses.

## Transcripts

bachelor student -1

0:0:0.0 --> 0:0:2.320

Interviewer

And I'll be taking an interview from you.

0:0:3.120 --> 0:0:11.490

Interviewer

Ohh for my final dissertation project and for this I want to know what are the problems that you're faced while.

0:0:12.230 --> 0:0:14.90

Interviewer

Looking for online courses online?

Interviewer

And.

0:0:17.280 --> 0:0:20.490

Interviewer

Is there any questions that you would like to ask beforehand?

0:0:21.730 --> 0:0:22.790

bachelor student -1

No, nothing you can start.

0:0:23.830 --> 0:0:26.390

Interviewer

OK. Is it OK that I record this call?

0:0:27.320 --> 0:0:27.580

bachelor student -1

Yeah.

0:0:30.70 --> 0:0:31.960

Interviewer

Can you please introduce yourself first?

0:0:32.750 --> 0:0:40.820

bachelor student -1

Yeah. I'm Gopal Aurora. I live in Gurgaon, India and in my 4th year of law right now.

0:0:42.530 --> 0:0:42.980

Interviewer

OK.

0:0:44.350 --> 0:0:48.480

Interviewer

A couple. Have you done any online courses before?

0:0:49.700 --> 0:0:51.420

bachelor student -1

Yeah, I've done a few in college, yes.

0:0:52.350 --> 0:0:54.630

Interviewer

What websites have you used for those?

0:0:55.710 --> 0:0:56.30

0:0:56.30 --> 0:1:5.880

bachelor student -1

Um, mostly Coursera. Like uh, we had institutional access for that and there was another course by national law University. So I did that.

0:1:7.760 --> 0:1:12.250

Interviewer

Can you describe your typical process when you decide to enroll in an online course?

0:1:13.460 --> 0:1:25.630

bachelor student -1

It so I filtered it first by, you know the field, because online courses are usually like very specific. So I try to filter it by field. Then I look at like.

0:1:31.620 --> 0:1:31.870

Interviewer

Ohh.

0:1:27.460 --> 0:1:46.760

bachelor student -1

What is the content of the course? They usually come with like a course. Somebody, right? Like what? Are you gonna cover stuff like that? Uh. And also I like to see if a lot of people have taken it because that's like, if a lot of people have completed it, because that's usually a sign of it being good. And sometimes I also see, like, who's offering it because.

0:1:49.870 --> 0:1:50.100

Interviewer

OK.

0:1:47.700 --> 0:1:52.280

bachelor student -1

I think that's important if it's up person or if it's university or something like.

0:1:53.650 --> 0:1:56.720

Interviewer

What are the major factors that you consider while?

0:1:57.450 --> 0:1:59.320

Interviewer

Fine. You choosing your course.

0:2:0.270 --> 0:2:13.600

bachelor student -1

Definitely the course content, like an overview of the course, um if it's free or not like and if it's paid, then how much is it for? Because you know a lot of times like they are good courses but they charge too much.

0:2:14.140 --> 0:2:16.870

bachelor student -1

Um, and I think who's offering it?

0:2:17.820 --> 0:2:18.220

Interviewer

OK.

0:2:17.530 --> 0:2:19.400

bachelor student -1

Like the university, which also good.

0:2:21.100 --> 0:2:26.490

Interviewer

Could you share any specific challenges that you faced while trying to select an online course in the past?

0:2:38.60 --> 0:2:38.230

Interviewer

Ohh.

0:2:27.880 --> 0:2:40.930

bachelor student -1

One specific challenge I think I faced is it it's a lap and a bunch of times and me where I finished the course only like when I finished the free course only to realise the certificate is paid. So I would like that information beforehand definitely.

0:2:41.10 --> 0:2:58.730

bachelor student -1

Ohh other challenges are faced it like ohh yeah I think just a better summary of the course would be nice. Like sometimes I pick it thinking basis of the title and the little something that they had that it's gonna be good or relevant but it turns out it's not. So maybe like a better breakdown or whatever is going to be covered in the course.

0:3:0.700 --> 0:3:4.580

Interviewer

Okay so while you were facing these challenges before that you said.

0:3:5.440 --> 0:3:6.270

Interviewer

What's?

0:3:8.30 --> 0:3:13.820

Interviewer (student)

How did you finally restore decision? You know that you want to pursue with this course?

0:3:15.0 --> 0:3:19.70

Interviewer

What are the things that led you to select that particular course?

0:3:21.100 --> 0:3:21.900

bachelor student -1

Hmm.

0:3:27.170 --> 0:3:41.460

bachelor student -1

I think it was a very like trial and error method for me, so like I did a bunch of them to realise that OK this 1I like this 1I did it some some that I liked so if for another go see the faculty will see what the university was same the course matter was similar then I picked it again.

0:3:42.220 --> 0:3:48.790

bachelor student -1

Ohh so I think it was mostly just trial and error and seeing like which websites have had a.

0:3:49.640 --> 0:3:56.430

bachelor student -1

Better sort of success rate. I think that's where like I mentioned in the beginning with reviews by other people like how many people have done it or finished it.

0:3:57.50 --> 0:4:7.580

bachelor student -1

Um that I think uh accounts because otherwise then I'm only trying in trial and editing it and reviewing it. If I get to hear someone else's opinion, that helps.

0:4:8.910 --> 0:4:9.70

Interviewer

OK.

0:4:9.140 --> 0:4:9.380

Interviewer

OK.

0:4:10.870 --> 0:4:15.670

Interviewer

Have you ever wanted a boss personalised approach to finding online courses?

0:4:17.230 --> 0:4:34.20

bachelor student -1

Yeah, I think a lot of times they're like very general and on different websites, it's they they describe it differently at different websites, they approach it differently. So I think I would like, you know, like instead of like me browsing like thousands of apps that I would want to more like particular.

0:4:34.600 --> 0:4:42.440

bachelor student -1

Ohh Mozart of customised experience that I can just get all I want in one place and then pick and choose whatever I want.

0:4:43.300 --> 0:4:45.420

bachelor student -1

So I think some customization would be nice.

0:4:47.290 --> 0:4:51.960

Interviewer (student)

How open are you in adopting a new tool that helps you you while selecting courses?

0:4:53.310 --> 0:5:0.720

bachelor student -1

I'm pretty open to it. Like I said, I've been doing a lot a lot of trial and error, so I wouldn't mind trying something new and if it works that would be fantastic.

0:5:2.410 --> 0:5:13.200

Interviewer

Is there anything specific you would like in a platform that offers you know, comparison of courses? Is there anything specific that you will you are looking into?

0:5:14.290 --> 0:5:15.100

Interviewer

On those website.

0:5:14.600 --> 0:5:21.140

bachelor student -1

Definitely like a more detailed course summary and maybe reviews that people have taken.

0:5:23.170 --> 0:5:24.570

Interviewer

Thank you, Gopal for your time.

0:5:25.260 --> 0:5:25.850

bachelor student -1

No problem.

0:5:25.380 --> 0:5:29.90

Interviewer

And this is all for the interview. Thank you so much.

0:5:29.530 --> 0:5:30.320

bachelor student -1

No problem.

0:5:30.330 --> 0:5:31.960)

Interviewer

stopped recording this call up.

0:5:32.580 --> 0:5:32.780

bachelor student -1

Yeah.

## Transcript -2

0:0:0.0 --> 0:0:0.340

Interviewer

Hi I am Interviewer, I'm conducting a survey for my master's dissertation project to understand what problems students face while selecting an online course. Is there anything you'd like to ask before I begin with the interview?

0:0:2.740 --> 0:0:10.430

Professional

No

0:0:4.110 --> 0:0:0.020

Interviewer

are you fine with me recording this call?

0:0:2.740 --> 0:0:10.60

Professional

Yes

0:0:01.50 --> 0:0:0.340

Interviewer

Can you please introduce yourself?

0:0:2.740 --> 0:0:10.430

Professional

I'm doctor Jagruti Prasad. Have an epidemiologist. I used to be a dental surgeon before and now I'm working.

0:0:11.130 --> 0:0:13.870

Professional

Ohh, the life sciences from.

0:0:14.510 --> 0:0:17.600

Professional

As an epidemiologist in public health, yes.

0:0:14.510 --> 0:0:17.600

Professional

0:0:19.700 --> 0:0:21.920

Interviewer (student)

Have you done any online courses before?

0:0:23.650 --> 0:0:24.120

Professional

Sorry.

0:0:24.870 --> 0:0:27.70

Interviewer (student)

Have you done any online courses before?

0:0:47.10 --> 0:0:48.90

Professional

Yes, I've taken them.

0:0:49.960 --> 0:0:54.800

Interviewer (student)

Can you describe your typical process when you decide to enroll in an online course?

0:0:57.190 --> 0:1:0.230

Professional

Typical process to enroll in an online course.

0:1:2.180 --> 0:1:5.540

Professional

I like if I have to launch SASS.

0:1:6.230 --> 0:1:18.380

Professional

Is the latest one that I had learned online. Then I look up on different websites and see where can I get the most cost effective SAS program.

0:1:19.140 --> 0:1:25.600

Professional

And where can I get the most details and the kind of topics that I'm looking for?

0:1:26.390 --> 0:1:27.720

Professional

I like go ahead with that.

0:1:29.300 --> 0:1:30.350

Interviewer (student)

What matters?

0:1:29.110 --> 0:1:30.910

Professional

So that kind of includes.

0:1:31.660 --> 0:1:33.940

Professional

Searching across all websites.

0:1:35.800 --> 0:1:40.880

Interviewer (student)

What factors do you consider while looking for you selected course?

0:1:44.400 --> 0:2:3.660

Professional

I look at the price of the course. I look at the kind of topics they are giving. I tell, I look at the duration of the courses I look at which person is taking the course, whose, who is it? Is it a robot holding the course and there is a human being? Is there an interactive course or not? Does it have tests or not? Does it give you a certificate or not?

0:2:5.980 --> 0:2:12.170

Interviewer (student)

Could you share any specific challenge you've faced while trying to select an online course in the past?

0:2:14.630 --> 0:2:35.850

Professional

A challenge? Yes. I mean challenge must be in finding all your criterias and having to check all of the available websites to see which one gives you the best possible course. So I think yes, figuring out which 1I think from all different websites is a task.

0:3:19.210 --> 0:3:25.720

Interviewer (student)

Can you describe a time when you felt overwhelmed by number of available available courses online?

0:3:28.670 --> 0:3:50.110

Professional

Yes, there are a lot of available courses, like if I'm like, I'm giving you the same example that I gave you a early morning fact, launch SAS and just the basics of it. I'll find about 500 across all websites. Say you Demi, say Coursera and all the other websites and also some of them to your own company funded websites. So it's tough to select.

0:3:51.310 --> 0:3:53.290

Professional

Ohh which one is the most?

0:3:54.790 --> 0:3:59.40

Professional

Beneficial in terms of the cost and the content they offer.

0:4:1.110 --> 0:4:5.660

Interviewer (student)

Have you ever wanted a more personalised approach to finding online courses?

0:4:7.560 --> 0:4:9.510

Professional

Yes, it could do better.

0:4:11.600 --> 0:4:15.760

Interviewer (student)

Could you elaborate on what you would expect from such a platform?

0:4:18.610 --> 0:4:22.520

Professional

It would be nice, like many travel websites have it, that all possible.

0:4:22.940 --> 0:4:38.250

Professional

Ohh, comparisons made from different websites on the costs and the courses and the person who's organising the course and all the details here and there, it would be nice to have one.

0:4:39.40 --> 0:4:46.230

Professional

Show a short place where you can compare it with every post, every other website and see which one makes which one is more.

0:4:46.930 --> 0:4:48.820

Professional

Ohh, specific to my needs.

0:4:50.990 --> 0:4:55.470

Interviewer (student)

How open are you and adopting a new tool that helps you while selecting courses?

0:4:58.890 --> 0:4:59.310

Professional

very open

Transcript -3

0:2:15.540 --> 0:2:33.150

Interviewer (student)

Hi, I'm Shailaja I'm a master's student at Brighton University and I'm posting a course in user experience design for my dissertation. I've taken a topic regarding online courses. What are the problems that students face people face while selecting online courses and I'm looking for a solution for that.

0:2:34.990 --> 0:2:39.120

Interviewer (student)

In this interview, I'd like to ask you a few questions regarding that, but.

0:2:40.320 --> 0:2:46.140

Interviewer (student)

Is there anything that you want to ask me before I start interviewing you?

0:2:49.330 --> 0:2:51.640

Bachelor student -2 [IT - 2020]

Ohh, when will this app be completed?

0:2:52.550 --> 0:2:54.160

Bachelor student -2 [IT - 2020]

The user experience part of it.

0:2:57.670 --> 0:2:58.640

Interviewer (student)

In few days.

0:3:0.360 --> 0:3:0.750

Bachelor student -2 [IT - 2020]

OK.

0:3:4.20 --> 0:3:5.950

Interviewer (student)

Is it OK that I record this call?

0:3:7.780 --> 0:3:8.210

Bachelor student -2 [IT - 2020]

In.

0:3:12.140 --> 0:3:14.410

Interviewer (student)

Can you please introduce yourself first?

0:3:16.970 --> 0:3:24.580

Bachelor student -2 [IT - 2020]

Okay. So I'm up enough for Prasad. I'm currently pursuing an information technology degree in Manipal University, Jaipur.

0:3:25.660 --> 0:3:33.720

Bachelor student -2 [IT - 2020]

And I have been turned at a pleased and it's called Room Technology Limited. And I'm a software developer.

0:3:34.670 --> 0:3:40.880

Bachelor student -2 [IT - 2020]

And I'm fond of programming languages such as JavaScript, Java and React JS.

0:3:46.10 --> 0:3:47.840

Interviewer (student)

Have you done online courses before?

0:3:49.650 --> 0:3:56.100

Bachelor student -2 [IT - 2020]

Yes, yes, I have completed an online course on Coursera before by John Hopkins University.

0:3:57.450 --> 0:3:59.320

Interviewer (student)

What other websites having used?

0:4:1.450 --> 0:4:4.210

Bachelor student -2 [IT - 2020]

Ohh I have used npml.

0:4:4.970 --> 0:4:14.260

Bachelor student -2 [IT - 2020]

That's the website of Government of India for online courses for university grads. And I've also used Coursera.

0:4:19.550 --> 0:4:23.990

Interviewer (student)

Can you describe me a typical process when you decide to enroll in an online course?

0:4:26.490 --> 0:4:40.320

Bachelor student -2 [IT - 2020]

Okay. So the first thing I do is I ask people about which course I should take. The people like my mentor, and then what I do is I try. I do research about that.

0:4:41.390 --> 0:4:58.50

Bachelor student -2 [IT - 2020]

Course on the Internet and I find the reviews about the about that goal and fill environmental also recommends it, and I'll surely take it up and also our price is also a factor on which I decide whether I should take the course or not.

0:5:0.810 --> 0:5:6.730

Interviewer (student)

Could you share any specific challenges that you have faced while trying to select an online course at the post?

0:5:10.10 --> 0:5:22.240

Bachelor student -2 [IT - 2020]

Ohh you can say that a particular course being offered by a company might not be available on a on the preferred website that I use, and it could be available on another website.

0:5:23.80 --> 0:5:34.400

Bachelor student -2 [IT - 2020]

I like a few courses by the University of Harvard is is are not available on course area, but there are available on you, you Demi. So it gets a bit tricky navigating between multiple websites.

0:5:39.280 --> 0:5:41.330

Interviewer (student)

How did you eventually make a decision?

0:5:45.60 --> 0:5:45.860

Bachelor student -2 [IT - 2020]

Eventually.

0:5:46.140 --> 0:6:2.370

Bachelor student -2 [IT - 2020]

Ohh, I settled on my mentor's decision and the price of that particular course. If these 2 things aligned with my interests, then I'll take up the course and if I have time in my life right now, yeah.

0:6:5.880 --> 0:6:9.780

Interviewer (student)

Have you ever wanted a more personalised approach to finding online courses?

0:6:12.850 --> 0:6:19.860

Bachelor student -2 [IT - 2020]

Yeah, sure. That sounds really great. That would really benefit me and it would save a lot of time.

0:6:21.940 --> 0:6:26.710

Interviewer (student)

Could you elaborate on what you would expect from a platform that?

0:6:27.580 --> 0:6:29.470

Interviewer (student)

Helps you finding online courses.

0:6:31.820 --> 0:6:51.50

Bachelor student -2 [IT - 2020]

What I can imagine is, uh, there can be a landing page on which multiple websites names are given and these websites are obviously course online course websites such as Coursera or UTMB and etc. So and.

0:6:51.130 --> 0:7:3.700

Bachelor student -2 [IT - 2020]

Ohh all of the courses of these websites are mentioned on on this particular website and I'm able to sort these courses according to price according to their relevance or their popularity.

0:7:4.980 --> 0:7:6.310

Bachelor student -2 [IT - 2020]

That would be.

0:7:8.180 --> 0:7:11.550

Bachelor student -2 [IT - 2020]

That would be really good for a user experience.

0:7:13.260 --> 0:7:15.280

Bachelor student -2 [IT - 2020]

Design of that application.

0:7:16.570 --> 0:7:21.30

Interviewer (student)

How open are you in adopting a new tool that help us while selecting courses?

0:7:23.440 --> 0:7:24.20

Bachelor student -2 [IT - 2020]

I'm open.

0:7:26.450 --> 0:7:26.700

Interviewer (student)

Is.

0:7:26.160 --> 0:7:28.330

Bachelor student -2 [IT - 2020]

I'm not strictly bound to a particular app.

0:7:30.460 --> 0:7:35.520

Interviewer (student)

Is there anything else that you would want this app or website to have?

0:7:38.710 --> 0:7:39.420

Bachelor student -2 [IT - 2020]

Ohh.

0:7:40.540 --> 0:7:41.340

Bachelor student -2 [IT - 2020]

I think they.

0:7:42.20 --> 0:7:42.250

Interviewer (student)

The.

0:7:41.420 --> 0:7:44.430

Bachelor student -2 [IT - 2020]

Sweeps website should.

0:7:45.970 --> 0:7:52.290

Bachelor student -2 [IT - 2020]

Compare the prices of the same cores offered on different platforms so that I can decide.

0:7:53.560 --> 0:7:58.450

Bachelor student -2 [IT - 2020]

Which one is the cheapest one? And I would take that.

0:8:1.150 --> 0:8:3.210

Interviewer (student)

Thank you so much. Have enough for your time.

0:8:4.260 --> 0:8:6.350

Interviewer (student)

I will stop recording the call now.