

Criteria A.1 - Explain and justify the need for a solution to a problem for a specified client/target audience.

Students aged 14-18 usually neglect their health due to increasing pressure from academics which reduces their overall fitness. This neglect of physical health leads to serious health issues, including obesity and cardiovascular diseases, which can have long-term consequences that affect their life. Neglecting physical health not only impacts the physical well-being of students but also affects their mental well-being, leading to increasing stress, anxiety, burnout, etc. These effects are further made worse by the link between physical health and academic performance, according to research, students who engage actively in physical activities perform better academically and manage stress and anxiety better. To focus on **development**, students should develop habits and routines that improve their overall well-being and allow them to grow and develop as a person and academically. **Adaptation** to these new routines and habits is important as following the new practices for only a short period before abandoning them can be counter-productive and worsen their existing unhealthy lifestyle. If this problem is addressed through **scientific and technically innovative solutions**, students will experience an improved fitness level, better mental health, and enhanced academic performance, that healthy practices can shape well-being

One of my target audience's biggest issues is the lack of regular physical activity in their daily lives. This lack of physical activity has many root causes, but the most significant factor is the academic stress and pressure placed on the students. Students are usually expected to meet a high standard set by their parents, teachers, and society which leads the student to allocate most of their time for academics often sacrificing opportunities for fitness. Students are expected and required to dedicate multiple hours to academics from classroom learning to homework, to frequent exam preparations leaving them little to no time for physical activities. The extremely high and unrealistic expectation placed on the students leads to anxiety and stress which may continue into adulthood as trauma, which significantly affects their mental well-being along with their degrading physical health. The lack of physical activity also results in a reduction in the endorphin levels which are extremely crucial for managing stress and anxiety, along with maintaining motivation for longer periods. Over time, this sedentary lifestyle, with the absence of exercise results in multiple health risks including poor cardiovascular health, obesity, weak immunity, and declining mental health. This issue is made worse due to the lack of prioritization of mental and physical health in schools resulting in students having very limited exposure to education on physical and mental health.

According to the World Health Organisation (WHO), 82% of adolescents around the world (85% of girls and 79% of boys) fail to meet the recommended guidelines for physical activity. WHO recommends at least 60 minutes of moderate to vigorous physical activity daily for individuals aged 5-17. This is recommended after extensive research done by the organization regarding the role physical activity plays in physical, mental, and cognitive health. Regular physical activity during adolescence contributes to cardiovascular fitness, strengthening of muscles, better bone health, and overall physical well-being. Furthermore, engaging in daily fitness activities will help the body regulate body weight and reduce the risk of chronic conditions such as obesity, diabetes, hypertension, etc later in life. Research by Donnelly and Lambourne in 2011, Chaddock-Heyman et al in 2014, and Singh et al in 2012 also show a strong correlation between physical health and academic performance, supporting WHO's claims. Students who exercise regularly often show better cognitive function, including memory, attention span, problem-solving skills, and patience. This is because physical activity stimulates the release of multiple neurochemicals such as dopamine, serotonin, and norepinephrine. These neurochemicals play important roles in improving mood, reducing stress, and brain function. Moreover, exercise ensures blood and oxygen flow to all vital body parts such as the brain. Due to the consistency in blood and oxygen flow to the brain, new neurons and synapses, which are especially important for learning and memory retention, tend to grow and develop. Additionally, regular physical exercises allow the adolescent brain to develop better sleep patterns, which is extremely important during adolescence brain and body development. Adolescents who exercise regularly tend to sleep deeply and wake up feeling more rested allowing them to approach academics with more energy and concentration.

Solving this growing problem of health negligence among students is extremely important because it may have severe effects on students' physical and mental health. Chronic illnesses such as obesity, cardiovascular diseases, diabetes, etc are often due to sedentary lifestyles which is becoming extremely common among today's adolescents. According to the World Health Organisation, lack of physical activity is one of the main reasons for global mortality. Around 5 million deaths annually are due to physical inactivity. Along with the physical impacts and reduction in lifespan, mental health is equally affected. A sedentary lifestyle is directly connected to rising levels of anxiety, depression, and burnout, especially among teens. Such mental health problems lead to a severe reduction in academic performance, productivity, and emotional well-being later on in life. If this issue is left unsolved, it could lead to an entire generation plagued by preventable sedentary lifestyles which reduces the overall societal well-being and productivity. We are taking steps towards the United Nations' Sustainable Development Goals (SDGs) by solving this issue. Especially SDG 3 - Good health and well-being and SDG 4 - Quality Education. By promoting fitness and physical activity among adolescents, we are working towards ensuring healthier lives and the well-being of future generations (SDG 3), along with that, by improving students' physical health, we ensure that the academic performance of the students is enhanced leading to productive learning and quality education (SDG 4)

To get a better understanding of the problem and the specific needs of my target audience, I interviewed multiple students aged 14-18 from my school along with a few teachers. After the interview, it was revealed that many students feel extremely burdened and overwhelmed by the increasing academic workload and pressure leaving them with no time for relaxation and physical activity. This repeating cycle of choosing academics above overall health and well-being has led to students sitting for long periods, reduced energy levels, and high stress levels. Many students also revealed that they feel mentally exhausted and extremely demotivated. Students showed a lot of interest in knowing how to effectively integrate exercises into their daily routines without ruining their study schedule. After interviewing students, I also talked to teachers to get a better understanding of the fitness levels of students. Teachers mentioned that most students lack energy and enthusiasm during the classes which may be due to the high mental strain. The teachers wanted to incorporate short and easy physical exercises in the classrooms that would help students be a little more active and attentive in class. However, due to the lack of proper guidance on how such exercises can be incorporated into school effectively.

A possible solution to this growing problem would be a scientific and technically innovative online product that meets the students' and teachers' needs and requirements. The product should be accessible to all students and teachers while catering to their needs and requirements without fail. This product could provide fitness resources and guidance that will help students include exercises or sports into their study schedule along with guidance for teachers on how they can incorporate effective exercises to help keep the students more attentive and active in class. The student resources could be simple at-home workouts/exercises, personalized gym planners, and guidance on how to incorporate sports of their choice into their daily life. Similarly, in addition to catering to the student's requirements, the teacher resources could be quick, simple, classroom-friendly exercises that can be done at allotted times during the school day which improves the student's focus, energy, and overall well-being. By creating a product that is accessible to both teachers and students, we address the root cause of physical inactivity among students while motivating teachers to promote physical health at school. This approach ensures the students experience better fitness, mental health, and academic performance in a simple yet effective way.

Criteria A.2 - Identify and prioritize primary and secondary research needed to develop a solution to the problem

Highest priority - 1, Lowest Priority 2

Area	Priority	Justification
Function	Priority - 1	Function is the most important aspect because the success of the product depends on how effectively it solves and helps my target audience overcome their health negligence. The features, usability, etc are that will make sure the students and teachers use the product. Without a well-functioning product, other aspects such as cost and Aesthetics become irrelevant
Target audience	Priority - 2	Another important aspect is the target audience. Understanding the target audience will make sure the solution meets the needs and preferences of the target audience
Aesthetics	Priority - 3	Aesthetics is not the most important aspect, however, it plays a significant role in user engagement. An attractive design will make sure the target audience does not get bored of the solution and will use the product more often. Aesthetics has a medium priority because a good-looking solution that does not function and does not meet the needs of the target audience will not matter.
Cost	Priority - 4	Although cost is usually an important aspect, because the primary focus of the usability and functionality of the solution, cost is given a lower priority. If the solution perfectly meets all the target audiences' requirements, the target audience will usually not mind paying for the solution as long as it is not too expensive and more affordable
Size	Priority - 5	Size is the least important aspect because the size of the solution can be adjusted and changed based on the platform or device used. However a lightweight solution is needed to make sure too much of the system resources are used along with faster loading times in the website.

Research question	Area	Research method	Justification
What features do students and teachers expect in a health based solution?	Function	Primary Research - Conduct surveys or interviews with teachers and students to understand their expectations	Understanding what features and content the target audience will ensure the products will meet their needs and expectations
How can a solution promote physical activity effectively	Function	Secondary Research - Analyze case studies and other similar websites to identify effective promotion techniques	Researching simple and effective ways to promote physical activity will help motivate students, and ensure the outcome of the solution is an improvement the health conditions of the target audience
What challenges might users face while using a health-focused solution	Function	Primary Research- Interview students and teachers to identify potentials challenges they might have faced with other products	Identifying potential challenges will allow for the making of a solution that addresses any usability/accessibility issues the target audience may face
What health and fitness challenges do students aged 14-18 face?	Target audience	Primary source - Interview students and teachers to gather insights into specific health challenges	Understanding the specific fitness challenges faced by the students ensures the solution is made to address those issues while being relevant, effective and achievable
What do the teachers think about incorporating fitness in schools	Target audience	Primary source - Interview teachers to understand their perspectives on the real life application of such products	As teachers play a major role in promoting fitness activities, finding out the teachers' perspectives will make sure the product is practical and relevant
What motivates students to participate in fitness activities	Target audience	Primary source - Interview students to find out what motivates them to engage in physical activities	Knowing and understanding what motivates the students will help in designing features that keep them engaged and make sure they do not suddenly lose motivation
What barriers prevent students from focusing on fitness	Target audience	Primary source - Interview students and teachers to identify barriers they may face	By understanding the barriers, the product can be designed to overcome them, enhancing accessibility
Does the platform size affect the loading time?	Size	Secondary source - Analysis of technical articles or web development guides to understand the relation between size and loading speed	Understanding the relation between the size of the platform and loading times will ensure the product is fast and smooth
Do users want to sacrifice size for extra features that may be useful?	Size	Primary source - Interview students and teachers to understand their preference for functionality versus size trade-offs	Finding out the target audience's idea of balance between size and features allows the solution to offer valuable features without compromising loading times
What are the ideal file formats for best quality with the least storage size?	Size	Secondary source - Analyze technical guidelines and online resources to identify best file formats	Choosing the right file formats and extensions will greatly optimize the platform ensuring the solution is fast and smooth.
How can colors and visuals stick to the theme of health while maintaining a balance between simplicity and aesthetic	Aesthetics	Secondary source - Understand design principles and conduct research on visual psychology	Understanding how colors and visuals will allow the solution to convey the intended message while keeping the users visually engaged with the content

What font styles are most readable for the target audience	Aesthetics	Secondary research - Research typography studies and guidelines to find ideal font styles suitable for digital solution	Selecting readable font styles suitable for digital products allows the user to easily navigate the solution and improve the user experience
Should the platform include animations or interactive elements? If so, how?	Aesthetics	Primary source - Interview students and teachers on their preferences Secondary source - Research articles on user experience design to identify the best practices for animations and interactive element	Researching the use of animations and interactivity will make sure the platform is engaging without the user being overwhelmed
Is it possible to use free tools to make the product	Cost	Secondary source - Research on open-source of free software tools that can be used to build the website	Exploring and knowing about free tools will help create cost-effective products without compromising the solution's quality.
What is the cost difference between applications and web-based products?	Cost	Secondary source - Review articles, case studies or technical comparisons of application and web-based product development and maintenance cost	Understanding the cost differences will allow for justified decisions on which platform to create the product. Making sure the final product aligns with the project's budget plans.
How much are schools willing to invest in such solutions?	Cost	Primary source - Interview the school administration team to understand budget constraints	Knowing the schools' investment willingness will allow for the formation of a price strategy and ensure the product is accessible while being budget friendly

Criteria A.3 - Analyse a range of existing products that inspire a solution to the problem

Product 1: Apple Watch Series 10

The Apple Watch Series 10, is a smartwatch designed by Apple to help you stay productive AND healthy in your daily life. It offers advanced features such as a heart rate detector, blood pressure detector, sleep detector, and can even perform ECG. The watch can detect stress and anxiety by checking the HRV (Heart rate Variability) and detecting irregular patterns that are unrelated to physical activity. Link - https://amzn.in/d/aV6Plmw	
Strengths: 1. Advanced health features: The apple watch 10 has non-invasive blood pressure monitoring, ECG, temperature tracking and heart rate variability for detailed health details without the need of a hospital 2. Fits into the Apple ecosystem without issues. All Apple products such as iPhone, iPad, and Mac sync effortlessly with the new Series 10 watch enhancing user experience 3. Quality like titanium and sapphire crystal are used in the watch to ensure a premium build that is durable. 4. Apple combines fitness tracking, health monitoring, calls, messaging, music, and productivity apps in one device. 5. Apple's name is trusted across the technology industry due to its giving it an edge over its competitors and encourages customers to buy apple products 6. Apple watch receives regular software updates which	Weakness: 1. Apple watch series 10 is very Expensive compared to competitors. 2. As the demand for such watches has increased exponentially over the years, many competitors offer similar health and fitness tracking features at lower prices. 3. The watch has a very short battery life and requires daily charging, which can be inconvenient compared to other wearables like Garmin watches 4. The apple watch is extremely dependent on the iPhone to fully function, and doesn't work properly for users without iPhones. 5. The advanced features like ECG and temperature tracking may be difficult for less tech-savvy users without any guidance.

enhance functionality and user experience.	
Opportunity:	Threat:
<p>1. Due to the rising demand for health monitoring and fitness tracking wearables, the Series 10 has potential to reach a wider range of users.</p> <p>2. Collaborations with healthcare facilities/Hospitals can help the watch reach the level of a medical-grade tool capturing the attention of more users.</p> <p>3. Targeting regions across the world with affordable versions can expand the customer base.</p> <p>4. The overall growth in the wearable market, Apple is given more room for innovation and creativity.</p> <p>5. Implementing AI-based insights and tips personalized for each user in terms of health and fitness can further set the watch out from the competition.</p>	<p>1. Apple watch series 10 faces a lot of intense Competition from brands like Fitbit, Garmin, and Samsung that offer similar or better features at lower prices. This increase in competition and pricing gaps could eventually lead to loyal apple users to explore alternatives.</p> <p>2. Due to the increasing market, standing out among competition is becoming increasingly difficult.</p> <p>3. Health features such as blood pressure monitoring may face accuracy issue which impacts the brands credibility.</p> <p>4. Questions on how health data is stored and used could trigger privacy-conscious consumers.</p>
Conclusion:	
The apple watch series 10 combines advanced health features with a premium build which fits seamlessly into the Apple ecosystem. Its features, like non-invasive blood pressure monitoring and ECG makes the watch a great tool for keeping track of health and encouraging themselves to move around more often. However, due to its high price, limited compatibility with non-iPhone users and its comparatively short battery life it may not seem like a good product to many students who are usually limited to spending money given by parents	

Product 2: Fidget spinners

<p>Product Description - A fidget spinner is a handheld device designed to help people focus and relieve stress. It has a calming tactile with just the flick of your finger. It was originally made for individuals with anxiety, ADHD, or stress. However, it became a popular tool to improve concentration, calm down, handle nervousness, or simply spin for fun.</p> <p>Link - https://a.co/d/911c8xW</p>	
<p>Strengths:</p> <ol style="list-style-type: none"> 1. Fidget spinners are simple yet effective way to manage stress and anxiety through repetitive spinning motions. Allowing users to improve focus. 2. Due to the low cost, fidget spinners are easily accessible to a wide market 3. Due to its lightweight allowing users to carry it anywhere at anytime 4. They are made using sturdy materials like plastic, metal or ceramic for long term uses 5. Available in many various colors, designs and materials for making it highly customizable 	<p>Weakness:</p> <ol style="list-style-type: none"> 1. Short-Term Trend: Once a viral craze, its popularity has diminished, reducing long-term market appeal. 2. In some cases, it may distract people from their work, especially in classroom or office place. 3. As most spinners are generic, with no dominant fidget spinner brand, none of the customers are brand loyal 4. Due to its small and lightweight design, it can be easily misplaced or lost 5. The spinner is not tailored for any specific therapeutic needs apart from general stress relief
<p>Opportunity:</p> <ol style="list-style-type: none"> 1. By partnering or organizing events in corporate workspaces can encourage more people to buy and use fidget spinners for stress relief, positioning fidget spinners as stress-relief tool and not just a toy. 2. By targeting specific groups such as individuals with anxiety or those who practice mindfulness, more users will become aware of its usefulness. 	<p>Threat:</p> <ol style="list-style-type: none"> 1. The fidget spinner was once trending in 2017 and ever since the popularity has faded reducing market demand 2. Many view fidget spinners as just a toy rather than legitimate stress-relief tool which mostly limits its user age group to 5-13 year old kids 3. Low quality products can lead to accidents, injuries, or choking hazards especially among children.

3. Using Eco-Friendly Materials such as biodegradable or recycled materials to create sustainable spinners will appeal to eco-conscious buyers.	4. There are many alternatives in the market like stress balls, fidget cubes, or digital mindfulness apps may dominate the market and not allow fidget spinners to grow again 5. Due to the small design, it can be a choking hazard for children 6. Many of the fidget spinners use non-recyclable materials for mass production which raise numerous environmental concerns
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Conclusion:

Fidget spinners are very cost-effective and portable for stress relief and focus improvement on the go. The students who have sedentary habits, which roots from stress and anxiety from academics, fidget spinners are a simple yet effective way to reduce stress. However, fidget spinners acting as a toy that students may play with during classes, its fading popularity, and the lack of proven long-term benefits, limits the number of people that would choose fidget spinners over other stress relief tools.

Product 3: Vidhyanjali Academy - 10 Morning Exercises for Students

The website, Vidhyanjali Academy, aims to promote physical fitness among students using simple morning exercises. The article "10 Morning Exercises for Students" discusses how physical activity is important in improving students' cognitive abilities and overall academic performance. The key features of the website include exercise recommendations, planning tips, and a focus on the benefits of morning workouts

Link

<https://www.vidhyanjaliacademy.com/10-morning-exercises-for-students/>



Strengths:

1. The website is specifically designed to address the fitness needs of students during school hours
2. The website has clear instructions and well-structured points that make it easy to understand and accessible for readers of all ages
3. The website highlights the importance of starting the day with physical activity, promoting health and well-being
4. The title and keywords are optimized for search engines (SEO - Search Engine Optimization), which makes it easier to find online
5. All the exercises listed in the website are simple and require no equipment which makes implementing them easy in most places
6. The page has a clean and straightforward design which makes it easy to navigate which results in a pleasant user experience

Weakness:

1. The exercises that are listed on the website are basic and don't provide unique variations that cater to different needs
2. There is a major lack of visual demonstrations which could help users understand the exercises effectively
3. There are no references to professional fitness experts or any secondary sources in the website to back up the recommended exercises
4. The content is not regularly updated and may lose its relevance over time.
5. The article restricts itself to exercises that can be done in the morning only and does not mention or talk about fitness routines for other parts of the day

Opportunity:

1. Adding images, looped videos, or GIFs to demonstrate the exercises would make the content more helpful and easy to understand.
2. The website could have regular updates based on the current fitness trends or feedback to keep the content fresh and relevant
3. Offering downloadable PDFs or infographics will make it easy for users to refer to the exercises offline.
4. By partnering with experts or fitness agencies can improve the website's credibility
5. The website could include customization options for different fitness levels (beginner, intermediate, advanced) to cater to

Threat:

1. There are numerous similar articles online that may overshadow this website unless it offers something unique
2. Without any engaging visuals or interactive features users may leave the page before finishing the content. Resulting in low retention rates
3. Some users might oversimplify and think of the content as too basic or not challenging enough
4. Any changes in Google's search engine algorithms could reduce the article's visibility and web traffic
5. The content could be copied or used somewhere else without giving proper credits
6. As fitness trends change and evolve, the exercises provided

wide range users.	in the website may become outdated if not regularly updated
<p>Conclusion: The "10 Morning Exercises for Students" article talks about the importance of physical activity through simple exercises that require no equipment. The accessibility of the article makes it an effective and easy to use resources for students who want to integrate some form of movement into their lifestyles. However, the lack of visual demonstrations and limited variety of exercises may reduce engagement and long-term motivation.</p>	

Product 4: Healthline - Workout Routines for Men

<p>The website, Healthline, provides a detailed guide on workouts specifically made for men, catering to different fitness levels, from beginners to advanced trainees. The article should include a training program aimed at achieving specific fitness goals, such as weight loss and muscle gain, the importance of proper exercise techniques, recommendations for equipment and rest intervals, and recovery methods. The key features of the website include detailed workout routines, exercise recommendations, and nutrition guides</p> <p>Link - www.healthline.com/nutrition/workout-routine-for-men</p>	
<p>Strengths:</p> <ol style="list-style-type: none"> 1. The guide provides workout plans for all fitness levels from beginner to advanced 2. The content is created by experts in the field and Reviewed by medical professionals, which enhances the reliability and trust in the guide 3. The guide has a Well-Organized Layout with Clear sections and headings making it easy for readers to find specific information 4. The guide is available online for no cost at all making it accessible for all 5. The guide covers not only the workouts but also nutrition and recovery, offering a complete fitness guide 6. The content is frequently updated and reviewed by experts to keep the content fresh and align with current fitness trends and research 	<p>Weakness:</p> <ol style="list-style-type: none"> 1. There is a Lack of Visual Demonstrations, the guide uses minimal amount of images or videos, which makes understanding exercises or relating to the guide more difficult 2. The routines are broad for a general audience may not cater to individuals with specific fitness needs or health conditions 3. Most exercises in the website require gym equipment, which may not be accessible to all users 4. The guide dont not provide tools or tips to track the fitness progress, which could boost user motivation 5. The depth of information may seem intimidating for users who are new to fitness 6. The website also lacks Community Interaction, It does not contain any forums or sections for user questions, feedback, or shared experiences 7. As the title and content focus and are specific to men, potential female audience looking for similar guidance may be excluded
<p>Opportunity:</p> <ol style="list-style-type: none"> 1. One of the biggest opportunity the website has to grow is Including videos or GIFs for exercise demonstrations which makes exercises easier to follow 2. Remodeling the guide to offer personalized workout plans based on fitness goals, age, and available equipment would improve user reach 3. Broadening the target audience to include groups such as women, and senior citizens would increase user reach 4. Partnering with famous Fitness Brands or fitness professionals would increase credibility of the website 5. By making the guide mobile friendly or by creating an app for mobile, would retain users looking for alternatives that support mobile 	<p>Threat:</p> <ol style="list-style-type: none"> 1. There are countless Similar guides and fitness apps online with advanced features which makes it hard for the guide to stand out 2. Interactive apps/websites which provide tailored plans and progress tracking could encourage users to stop using static guides 3. Due the the generic nature of the conten, users might feel that the routines lack specificity and personalization 4. Changes in the search Algorithm could reduce web traffic and visibility online 5. Without any visual aids, the users may perform exercises incorrectly which could result in injury
<p>Conclusion: Healthline's workout guide provides effective and structured routines, expert advice, and nutrition tips. For students with sedentary lifestyles, this is a good and reliable starting point to improve their physical fitness, making exercise more trackable and manageable. However, the lack of visual aids and interactive tools makes it less engaging for beginners. Additionally, the name of</p>	

the guide may mislead certain female students.

Product 5: Human resources - University of Michigan

<p>The University of Michigan's SHRM (Society for Human Resource Management), provides multiple resources on mental and emotional health. In this article about stress management, it provides tools and strategies for people to understand and manage stress better, while constantly showing the importance of mental well-being and overall health. The key features of the website include stress management tools, educational resources, and support options of improving mental health Link - https://hr.umich.edu/</p>	
<p>Strengths:</p> <ol style="list-style-type: none"> 1. The page has a wide range on stress management strategies, including self-care, mindfulness, and social connection techniques, catering to a diverse range of users 2. The page is made by the University of Michigan's Human Resources department. The information is trustworthy and backed by a reputable institution 3. The content is organized clearly using multiple sections with descriptive headings making navigation easy and allowing for quick access to relevant information 4. The website provides practical tips and exercises, such as breathing techniques, allowing users to use the stress relief methods instantly 5. The page also provides link to additional materials such as sleep resources, providing comprehensive support for the users' mental and emotional well-being 6. The page encourages Social Connection by Emphasizing the importance of creating supportive relationships with other people, promoting a healthy coping mechanism for stress management 7. The page uses clear and concise language, making the content easy to understand and doesn't intimidate users, making it approachable even for individuals who are new to mental health education 	<p>Weakness:</p> <ol style="list-style-type: none"> 1. Due to the lack of visual aids, such as instructional videos or infographics, the user engagement, user retention and practical application of the mentioned techniques all go down. 2. The webpage has a clear lack of interactive tools, such as stress assessment quizzes or progress trackers, which could really enhance user engagement and makes the webpage feel personal 3. The advice provided in the webpage is very generalized and may not cater to specific individuals or circumstances, limiting the effectiveness for some users 4. Due to the extensive list of resources and content, there is a potential for Information Overload and might overwhelm users. Especially those who have cognitive difficulties 5. Due to the lack of regular updates to the webpage, the content becomes outdated over time, reducing its relevance and effectiveness, especially due to new studies and research in mental health
<p>Opportunity:</p> <ol style="list-style-type: none"> 1. Incorporating elements such as videos, audio guides, or infographics could improve user engagement and experience 2. By developing and introducing features like personalized stress assessments, progress trackers, or virtual workshops could provide specific and tailored support for individuals 3. Frequently updating the webpage with new research findings, new stress management techniques, or user testimonials could help the webpage retain its relevance and encourage users to visit the page frequently 4. Implementing features that improve accessibility for individuals with disabilities, such as screen reader and alternative text formats, could improve the user base 5. By creating forums or comment sections where users can share experiences, ask questions, and support each other could develop a sense of community, making the webpage stand out from the competition 	<p>Threat:</p> <ol style="list-style-type: none"> 1. Due to the abundance of online stress management tools and resources, users may divert their attention to alternative platforms, reducing webpage traffic 2. Continuous advancements in stress management research may result in the current content of the webpage becoming outdated and irrelevant 3. Without any interactive or multimedia features, the webpage could have difficulties in maintaining user interest and keeping user retention levels high 4. If the webpage does not meet diverse accessibility needs of users, it could potentially exclude users, especially users with disabilities 5. The extensive content in the webpage might overwhelm users, causing them to be discouraged or unmotivated to finish reading, resulting in them looking for simpler alternatives

Conclusion:

The University of Michigan's SHRM (Society for Human Resource Management) has multiple resources on stress management and mental health. For students leading sedentary lives, these resources help address stress, which is often linked to inactivity and academic pressure. However, the lack of interactive tools visual aids and personalized resources may limit how much it is able to engage audience.

Criteria A.4 - Develop a detailed design brief, which summarizes the analysis of relevant research

There is a serious health issue that was found in criteria A.1, Health neglect among students due to the increasing stress from academics. The problem of health neglect among students, caused mainly due to the increasing academic pressure and sedentary lifestyles of students, has a serious impact on their physical and mental well-being. The people affected by this problem are students aged 14-18 who have limited time to spend on fitness. As mentioned in A.1, This is an issue that needs to be addressed as soon as possible because the lack of regular physical activity not only leads to chronic health issues like obesity and cardiovascular diseases but also affects cognitive abilities and academic performance of students. This problem is made further compounded by the lack of focus on fitness and mental health education in schools. Addressing this issue makes sure students have a balance between physical and mental health along with academics. If this problem is not solved it could lead to a whole generation of students suffering from a sedentary lifestyle which could lead to various health issues resulting from the lack of physical and mental wellbeing.

After conducting primary research through surveys, interviews, and peer feedback, I found out that my target audience, Physically disabled individuals, face difficulties with job portals due to inaccessible layouts, hard to understand navigation and lack of customization option along with a low-contrast color scheme making it hard for people to read the text clearly, Especially people with cognitive impairments. After the primary research, I also conducted secondary research to further understand the importance of accessibility features such as high-contrast color schemes, screen-reader compatibility and keyboard navigation. These features are essential to make sure that the user with disabilities can interact with the digital solution independently and won't require the help of their surroundings. I also found out about the Web Content Accessibility Guidelines (WCAG), It provides framework and guidelines for the solutions design, ensuring it aligns with the global accessibility practices. The GCAW helps The WCAG will help me create a website that is truly accessible to all and actual focus on meeting the expectations and needs of target audience and not make a website for the sake of it

After conducting primary and secondary research to get a vague idea on whether I want to make a digital product or a physical product, I then analyzed similar products and solutions across the market to understand what aspects are missing in existing products. After the analysis I found out that many other digital products, mainly job portal, lack simple navigation, and assistive technology, and the products that DO have these features, usually don't have any job openings for disabled people. The observations made it clear that the major problems in the job market for disabled people is the lack of simplicity and the lack of equality. In designing the solution, the main goal will be to incorporate essential elements other products overlooked, which makes theirs products unsuitable for individuals with disabilities. By filling these gaps, my solution will offer a more inclusive experience as compared to a traditional job finding methods

After conducting various research and analysis, I have come to the conclusion that my product should be a fully accessible, user friendly digital job portal that gives the individuals with physical disabilities the opportunity to secure employment without facing unnecessary digital barriers. The job portal will have many accessibility features such as high contrast options, keyboard navigation, and support for screen readers. This solution will be made using HTML, CSS, and Javascript, which will allow me to customize the website as much as needed to cater to the needs and wants of my target audience. The portal aims to allow the target audience to navigate through the job market effectively and independently. This can be done by focusing on accessibility and simplicity of the job portal.

Criteria B.1 - Develop a design specification, which clearly states the success criteria for the design of a solution.

Specification area	Details	Justification
Aesthetics	Color Palette: <ul style="list-style-type: none">A consistent black-and-white theme will be used across the website to maintain simplicity, clarity, and professionalism. This color scheme ensures a clean, clutter-free design while avoiding playful or distracting colors, making it more	Color Palette: <ul style="list-style-type: none">Based on research from <i>Adobe Color Trends 2024</i>, black-and-white palettes improve readability and provide a professional look.<i>The Interactive Design Foundation (2023)</i> states that monochromatic schemes reduce distractions making content clear.

	<p>professional.</p> <p>Layout:</p> <ul style="list-style-type: none"> The website will contain structured layouts tailored to meet the user needs: <ul style="list-style-type: none"> The home will have clear sections for introduction and research, minimizing scrolling The students and teacher page will use a grid structure to logically separate information and resources while minimizing scrolling to reduce cognitive load <p>Imagery:</p> <ul style="list-style-type: none"> Subtle images and minimalist graphics support content without making it overwhelming across pages 	<p>Layout:</p> <ul style="list-style-type: none"> <i>Google UX Design survey (2023)</i> found that grid layouts help users find information faster as there is a logical separation of content. Based on an interview conducted with teachers and students, minimal scrolling is preferred by 80% of target audience <p>Layout:</p> <ul style="list-style-type: none"> A report by <i>Canva Web Design Trends 2023</i> suggests that minimalist visuals and graphics improve user engagement content overload
Cost	<p>Development & Design:</p> <ul style="list-style-type: none"> Utilizes free, open-source tools like HTML, CSS, JavaScript, and Bootstrap for coding. Graphics and icons will be sourced from platforms offering open-license resources (Unsplash, The Noun Project), while Canva will be used for creating banners and visuals. <p>Hosting:</p> <ul style="list-style-type: none"> Hosted on free platforms such as Vercel or GitHub Pages. <p>Maintenance:</p> <ul style="list-style-type: none"> Manual updates based on feedback and regular backups using free cloud storage solutions <p>Marketing & SEO:</p> <ul style="list-style-type: none"> Promoted through platforms that are free of cost (such as Instagram, LinkedIn, and Twitter) with basic SEO implemented using free tools like Google Keyword Planner 	<p>Development & Design:</p> <ul style="list-style-type: none"> According to <i>FreeCodeCamp (2023)</i>, <i>open-source tools are widely used and accepted while being cost-effective for web development</i> <i>Canva's Design Resources Report (2023)</i> states that open-source platforms reduce costs while providing high-quality images Based on a <i>Survey by Adove Express (2023)</i>, canva is preferred by 70% of student designs due to its ease of use and features <p>Hosting:</p> <ul style="list-style-type: none"> <i>Netlify's Hosting Comparision Report (2023)</i> shows that free hosting platforms (such as Github Pages) offer reliable performance and are ideal for projects with a limited budget <p>Maintenance:</p> <ul style="list-style-type: none"> <i>Google Cloud Study (2023)</i> shows that free cloud storage solutions are enough for basic backup requirements, making them perfect for small-scale websites. <p>Marketing & SEO:</p> <ul style="list-style-type: none"> <i>Hootsuite's Social Media Trends Report (2023)</i> shows that 85% of student audiences engage with content shared on social media platforms According to <i>Moz SEO Basics Report (2023)</i>, using free SEO tools like Google Keyword Planner improves website visibility on the web without costs
Target audience	<p>Primary Audience (Students):</p> <ul style="list-style-type: none"> The website is relevant to students aged 14-18, who neglect health due to academic pressure. The website features simple navigation, minimal cognitive load, and balanced colors to keep the audience engaged while still providing clarity. <p>Supporting Audience (Teachers):</p> <ul style="list-style-type: none"> Teachers play a key role in the health habits of students. Teachers will be supported using easily accessible printable resources, categorized dropdown menus, and a professional 	<p>Primary Audience (Students):</p> <ul style="list-style-type: none"> According to <i>CDC Youth Risk Behavior Survey (2023)</i>, over 70% of high school students neglect health due to academic needs <i>Nielsen Norman Group (2023)</i> mentions that clear navigation and reduced cognitive load improve engagement and user retention. <i>Adobe Color Trends (2024)</i> states that balance and neutral color palettes reduce visual strain and increase focus. <p>Supporting Audience (Teachers):</p> <ul style="list-style-type: none"> A study by <i>Education Week (2023)</i> found that teacher intervention increases student participation

	<p>layout optimized for school use to encourage students to develop positive health habits.</p>	<p>in school health programs by 60%.</p> <ul style="list-style-type: none"> • <i>Teacher Insights Survey (2024)</i> found that 85% of teachers prefer printable materials for quick classroom use • According to <i>Canva's Web Design Trends (2023)</i>, professional layouts and organization in educational tools increase trust and resource usage among teachers.
Size	<p>Homepage:</p> <ul style="list-style-type: none"> • Single page with 3-4 sections (problem introduction, supporting research, call-to-action, and image/quote section) for quick understanding without the need to scroll <p>Teachers' Page:</p> <ul style="list-style-type: none"> • The main page contains benefits and one subpage with printable exercise guides for easy classroom use. <p>Students' Page:</p> <ul style="list-style-type: none"> • The main page addresses unhealthy habits with 1-2 subpages (Do-at-Home Exercises and Gym Workout Planner) featuring editable tables and sample plans. <p>Interactive Elements:</p> <ul style="list-style-type: none"> • Lightweight and editable tables along with compressed media to ensure fast loading and smooth user experience. 	<p>Homepage:</p> <ul style="list-style-type: none"> • <i>Google UX Design Survey (2023)</i> shows that single-page designs reduce cognitive load, helping users understand information 40% faster. • <i>Nielsen Norman Group (2023)</i> found that users prefer minimal scrolling, with engagement increasing by 75% <p>Teacher page:</p> <ul style="list-style-type: none"> • According to the <i>Teacher Insights Survey (2024)</i>, 80% of teachers prefer resources that can be accessed with two clicks. • <i>Education Week (2023)</i> shows that printable materials are favored in classrooms especially when internet access is unstable. <p>Student page:</p> <ul style="list-style-type: none"> • <i>CDC Youth Risk Behavior Survey (2023)</i> shows that visual resources increase student engagement in health activities by 50%. • <i>Youth Digital Interaction Report (2023)</i> mentions that breaking content into subpages improves understanding and increases user retention. <p>Interactive elements:</p> <ul style="list-style-type: none"> • <i>Google Page Experience Update (2023)</i> proves that websites that load within 2.5 seconds retain 70% more users. • <i>Web Performance Insights (2024)</i> states that compressed images and resources improve usability without compromising functionality.
Function	<p>Functionality:</p> <ul style="list-style-type: none"> • Clear navigation hub on the homepage for quick access to key pages. • The students' page provides personalized fitness tools with subpages that lead to "At-Home Exercises" and "Gym Workout Planner." • The teacher's page features exercise benefits, such as downloadable PDFs and a dropdown for in-class activities. <p>Interactive Elements:</p> <ul style="list-style-type: none"> • Hover effects on navigation buttons, editable workout tables, downloadable guides, and demo videos. <p>Simplicity:</p> <ul style="list-style-type: none"> • Minimalistic design with a top navigation bar, grid layouts, clear headings, and concise content for easy engagement and quick reference. 	<p>Functionality:</p> <ul style="list-style-type: none"> • <i>Nielsen Norman Group (2023)</i> states that clear navigation improves user task completion rates by 60% • According to the <i>CDC Youth Fitness Engagement Report (2023)</i>, students are 45% more likely to follow fitness plans that are personalized. • <i>Teacher Insights Survey (2024)</i> shows that 78% of educators prefer downloadable and printable resources for offline use. • <i>Education Week (2023)</i> states dropdown menus help teachers quickly locate in-class resources without the need for an extensive search. <p>Interactive Elements:</p> <ul style="list-style-type: none"> • <i>Web User Interaction Report (2023)</i> shows that hover effects improve clarity, reducing user errors by 30%. • <i>Digital Learning Tools Study (2024)</i> found that editable tables and demo videos increase user engagement and learning by 50% <p>Simplicity:</p>

		<ul style="list-style-type: none"> <i>Interactive Design Foundation</i> (2023) notes that minimalistic layouts reduce cognitive load, making websites 40% easier to navigate <i>Google UX Trends Report</i> (2023) found that grid layouts and concise headings improve understanding and reading efficiency
Security	<p>Input Validation:</p> <ul style="list-style-type: none"> All forms and user inputs will be carefully checked using JavaScript to block harmful code and allow only correct information to be submitted. <p>Secure Links:</p> <ul style="list-style-type: none"> All anchor tags and buttons will be tested to prevent broken or unsafe links and to make sure users aren't directed to dangerous websites. <p>Secure Hosting:</p> <ul style="list-style-type: none"> The website will be hosted on GitHub Pages, which uses HTTPS encryption to safeguard data shared between the website and its users <p>Content Security:</p> <ul style="list-style-type: none"> Downloadable files and images will be sources and cited from trusted sources to prevent harmful content <p>Code Protection:</p> <ul style="list-style-type: none"> Avoiding risky functions like eval() and restricting unnecessary access to the website's structure(DOM) to prevent exploitation. 	<p>Input Validation:</p> <ul style="list-style-type: none"> According to the <i>OWASP Web Security Guidelines</i> (2024), input validation prevents up to 85% of common web vulnerabilities. <p>Secure Links:</p> <ul style="list-style-type: none"> <i>Google Search Quality Guidelines</i> (2023) state that secure and functional links increase trust and credibility. Additionally, it reduces bounce rates by 25% <p>Secure Hosting:</p> <ul style="list-style-type: none"> <i>GitHub Pages Documentation</i> (2024) states that HTTPS is enabled by default, making sure data is secure when transmitting between the user and the website. <p>Content Security:</p> <ul style="list-style-type: none"> <i>National Cyber Security Centre (NCSC) Report</i> (2023) warns that unverified content sources are one of the largest malware distributors. <p>Code Protection:</p> <ul style="list-style-type: none"> <i>OWASP Secure Coding Practices</i> (2024) show that functions like `eval()` are very vulnerable to code injection attacks and should be avoided. Restricting DOM access prevents attackers from compromising user data.
Technical skills	<p>Development Tools:</p> <ul style="list-style-type: none"> Frontend: HTML, CSS, and JavaScript create responsive elements and improve user interaction. <p>Performance Optimization:</p> <ul style="list-style-type: none"> Compressed images and lightweight resources improve loading speed across devices. <p>Testing & Debugging:</p> <ul style="list-style-type: none"> Cross-browser and responsiveness testing ensure compatibility and usability. <p>Design Tools:</p> <ul style="list-style-type: none"> Canva is used for creating banners, icons, and visuals. 	<p>Development Tools:</p> <ul style="list-style-type: none"> <i>Mozilla Developer Network (MDN) Web Docs</i> (2024) explains that HTML, CSS, and JavaScript are essential for creating responsive and interactive web pages for free. <p>Performance Optimization:</p> <ul style="list-style-type: none"> <i>Google PageSpeed Insights</i> (2023) shows that optimized resources significantly enhance loading times, improving user experience. <p>Testing & Debugging:</p> <ul style="list-style-type: none"> <i>BrowserStack Testing Trends Report</i> (2023) highlights that cross-browser testing ensures consistent functionality on different browsers and devices. <p>Design Tools:</p> <ul style="list-style-type: none"> <i>Canva Design Trends Report</i> (2024) mentions that Canva is a flexible tool for creating professional-quality graphics quickly and easily.

Success Criteria

Aspect	Band 1-2	Band 3-4	Band 5-6	Band 7-8
Aesthetics	<p>Color Palette: A black-and-white theme is not used</p>	<p>Color Palette: A black-and-white theme is used but inconsistently.</p>	<p>Color Palette: A black-and-white theme is mostly consistent</p>	<p>Color Palette: A black-and-white theme is consistently used across the</p>

	<p>across the website.</p> <p>Layout: The layout is cluttered with unclear sections and poor structure.</p> <p>Imagery: Images and graphics are distracting or irrelevant.</p>	<p>Layout: The layout has some structure but lacks clear section separation.</p> <p>Imagery: Images are present but sometimes overwhelm the content.</p>	<p>across pages.</p> <p>Layout: The layout is mostly structured with minimal scrolling.</p> <p>Imagery: Images support content but could be less intrusive.</p>	<p>website.</p> <p>Layout: The layout is fully structured with clear sections and minimal scrolling.</p> <p>Imagery: Subtle images and minimalist graphics are present to consistently support the content.</p>
Cost	<p>Development & Design: Unnecessarily paid tools are used.</p> <p>Hosting: Paid hosting is used without need.</p> <p>Maintenance: No updates or backups are planned.</p> <p>Marketing & SEO: Paid marketing and no SEO tools are used.</p>	<p>Development & Design: Some free tools are used with some unnecessary paid resources.</p> <p>Hosting: Hosting is partially free.</p> <p>Maintenance: Updates are infrequent with limited backup solutions.</p> <p>Marketing & SEO: Mostly free marking or basic SEO tools are used inconsistently.</p>	<p>Development & Design: Most tools users are free with minimal paid resources.</p> <p>Hosting: Hosting is mostly free with few paid elements</p> <p>Maintenance: Manual updates occur with occasional free backups.</p> <p>Marketing & SEO: Most of the marketing is done for free with some SEO efforts.</p>	<p>Development & Design: All development and design are free.</p> <p>Hosting: Fully free hosting.</p> <p>Maintenance: Regular manual updates and free backups are consistently used.</p> <p>Marketing & SEO: Marketing uses free platforms with consistent basic SEO tools.</p>
Target audience	<p>Primary Audience: The website is not relevant or engaging for students aged 14-18.</p> <p>Supporting Audience: No resources or teacher-focused features are provided.</p>	<p>Primary Audience: The website is relevant but lacks student-friendly features.</p> <p>Supporting Audience: Limited resources or poorly structured teacher features.</p>	<p>Primary Audience: The website is mostly relevant with basic navigation and clarity.</p> <p>Supporting Audience: Useful resources were provided but with minor usability issues.</p>	<p>Primary Audience: The website is fully relevant with simple navigation and clear, engaging content.</p> <p>Supporting Audience: Easily accessible resources with structured menus and professional layouts.</p>
Size	<p>Homepage: The homepage lacks clear sections or requires excessive scrolling.</p> <p>Teachers' Page: No teacher resources or subpage provided.</p> <p>Students' Page: No student resources or subpages were provided.</p> <p>Interactive Elements: No interactive elements are included.</p>	<p>Homepage: The page has sections but lacks clarity or requires some scrolling.</p> <p>Teachers' Page: The teacher page lacks clarity or has incomplete resources.</p> <p>Students' Page: The student page is unclear or lacks personalized resources.</p> <p>Interactive Elements: Interactive elements are present but poorly optimized.</p>	<p>Homepage: The homepage has clear sections with minimal scrolling.</p> <p>Teachers' Page: The teacher page has clear benefits and a functional subpage.</p> <p>Students' Page: The student page has 1-2 subpages with basic editable resources.</p> <p>Interactive Elements: Interactive elements are functional with minor optimization issues.</p>	<p>Homepage: The homepage has 3-4 clear sections and requires no scrolling.</p> <p>Teachers' Page: The teacher page has clear sections and subpages with printable resources.</p> <p>Students' Page: The student page has 1-2 clear subpages with editable resources.</p> <p>Interactive Elements: Interactive elements are lightweight, editable, and well-compressed.</p>
Function	<p>Navigation Hub: Navigation is unclear or missing key pages.</p> <p>Students' Page: No personalized fitness tools or subpages are provided.</p>	<p>Navigation Hub: Navigation exists but is difficult to use or incomplete.</p> <p>Students' Page: Fitness tools are present but lack functionality or</p>	<p>Navigation Hub: Navigation is mostly clear with quick access to key pages.</p> <p>Students' Page: Fitness tools are functional with</p>	<p>Navigation Hub: The navigation hub is clear, with easy access to all pages.</p> <p>Students' Page: The students' page provides fully functional fitness tools with clear subpages.</p>

	<p>Teachers' Page: No resources were provided.</p> <p>Interactive Elements: There are no interactive elements.</p> <p>Simplicity: Cluttered design.</p>	<p>clarity.</p> <p>Teachers' Page: Resources are unclear or incomplete.</p> <p>Interactive Elements: Few elements with limited use.</p> <p>Simplicity: Some simplicity but is inconsistent.</p>	<p>accessible subpages.</p> <p>Teachers' Page: Includes exercise benefits and most interactive elements.</p> <p>Interactive Elements: Functional elements are present.</p> <p>Simplicity: Mostly minimalistic and clear.</p>	<p>Teachers' Page: Includes clear exercise benefits, along with all mentioned interactive elements.</p> <p>Interactive Elements: All interactive elements work well.</p> <p>Simplicity: Consistently clear and minimalistic.</p>
Security	<p>Input Validation: No validation was applied.</p> <p>Secure Links: Broken or unsafe links are present.</p> <p>Secure Hosting: No secure hosting was used.</p> <p>Content Security: Files from unverified sources.</p> <p>Code Protection: No code protection was implemented.</p>	<p>Input Validation: Basic validation with loopholes.</p> <p>Secure Links: Few links tested but some issues remain.</p> <p>Secure Hosting: Hosting lacks proper encryption.</p> <p>Content Security: Some files are cited but not all.</p> <p>Code Protection: Minimal protection with vulnerabilities.</p>	<p>Input Validation: Mostly secure input checks.</p> <p>Secure Links: Most links are safe and functional.</p> <p>Secure Hosting: Hosted securely with basic encryption.</p> <p>Content Security: Most files are from trusted sources.</p> <p>Code Protection: Adequate code protection is in place.</p>	<p>Input Validation: All inputs are securely validated.</p> <p>Secure Links: All links are secure and functional.</p> <p>Secure Hosting: Hosted with HTTPS ensuring full security.</p> <p>Content Security: All files are from trusted, cited sources.</p> <p>Code Protection: Strong code protection with no loopholes.</p>
Technical skills	<p>Frontend Development: No responsiveness or interaction.</p> <p>Backend Development: No backend functionality.</p> <p>Performance Optimization: No optimization was applied.</p> <p>Testing & Debugging: No testing was done.</p> <p>Design Tools Usage: No visuals or poor-quality graphics.</p>	<p>Frontend Development: Basic responsiveness with glitches.</p> <p>Backend Development: Basic backend with limited functions.</p> <p>Performance Optimization: Some images/resources were compressed.</p> <p>Testing & Debugging: Minimal testing with major issues.</p> <p>Design Tools Usage: Basic visuals with inconsistent use.</p>	<p>Frontend Development: Mostly responsive with minor issues.</p> <p>Backend Development: Functional backend with minor flaws.</p> <p>Performance Optimization: Most resources are optimized for speed.</p> <p>Testing & Debugging: Adequate testing with few issues.</p> <p>Design Tools Usage: Good-quality visuals with minor flaws.</p>	<p>Frontend Development: Fully responsive with a smooth interaction.</p> <p>Backend Development: Fully functional backend with no issues.</p> <p>Performance Optimization: All resources are fully optimized.</p> <p>Testing & Debugging: Thorough testing with no major issues.</p> <p>Design Tools Usage: High-quality, consistent visuals were used.</p>

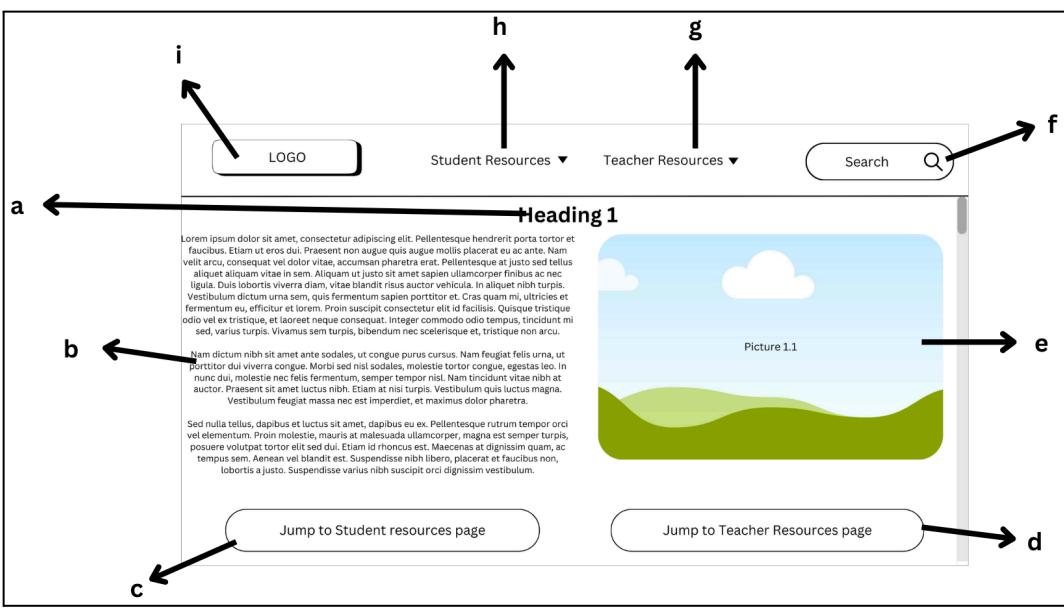
Criteria B.2 - Develop a range of feasible design ideas, which can be correctly interpreted by others

Overall Plan for the entire website sketches:

Homepage - 4 Sketches	Mainp page -	Subpages -

Homepage:

<i>Sketch 1:</i>	<p>Labelling: A: Heading 1 B: Text C: 'Jump to' Button</p>
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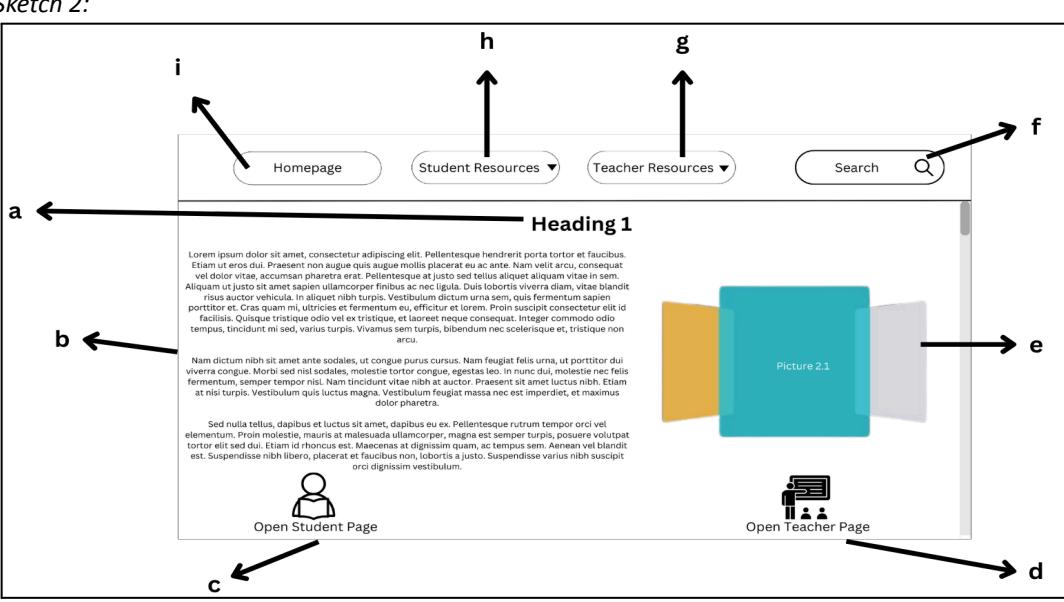


- D: 'Jump to' Button
- E: Picture
- F: Search bar
- G: Dropdown
- H: Dropdown
- I: Website logo and Homepage button

Annotations:

- A: Heading 1** - The main heading that introduces the purpose of the homepage.
- B: Text** - Descriptive text providing context or instructions to users.
- C & D: 'Jump to' Buttons** - Navigation buttons allowing users to quickly move to different page of the website
- E: Picture** - A visual element relevant to the content/website's theme to engage users
- F: Search Bar** - Enables users to search for specific content on the site.
- G: Dropdown (Teacher Page)** - A navigation element for accessing teacher-specific resources.
- H: Dropdown (Student Page)** - A navigation element that expands to show links or sections for student-related content.
- I: Website Logo and Homepage Button** - A clickable element that brings users back to the homepage.

Sketch 2:



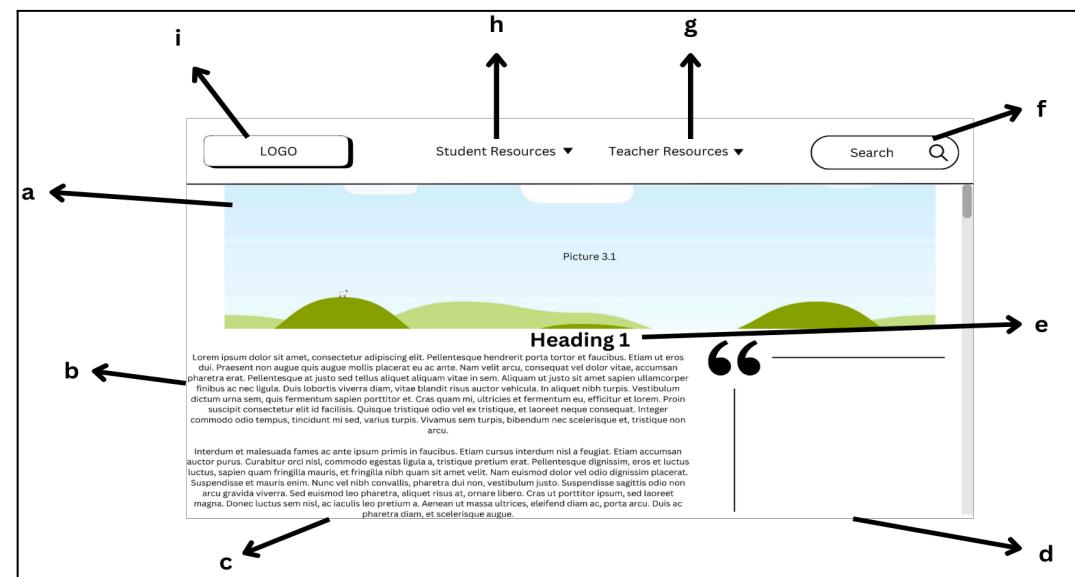
- A: Heading 1 -
- B: Text -
- C: 'Open Student Page' Button
- D: 'Open Teacher page' Button -
- E: Image carousel-
- F: Search bar -
- G: Dropdown -
- H: Dropdown -
- I: Homepage button -

Annotations:

- A: Heading 1** - Main title indicating the purpose of the homepage.
- B: Text** - Supporting information or welcome message for users.
- C: 'Open Student Page' Button** - A direct link to the student main page.
- D: 'Open Teacher Page' Button** - A direct link to the teacher main page.
- E: Image carousel** - A rotating gallery showcasing multiple relevant images in sequence to engage users visually and provide dynamic content interaction
- F: Search Bar** - Helps users find information on the site.
- G: Dropdown (Teacher Page)** - A navigation element for accessing teacher-specific resources.

- H: Dropdown (Student Page)** - A navigation element that expands to show links or sections for student-related content.
I: Homepage Button - Takes users back to the homepage from any page.

Sketch 3:



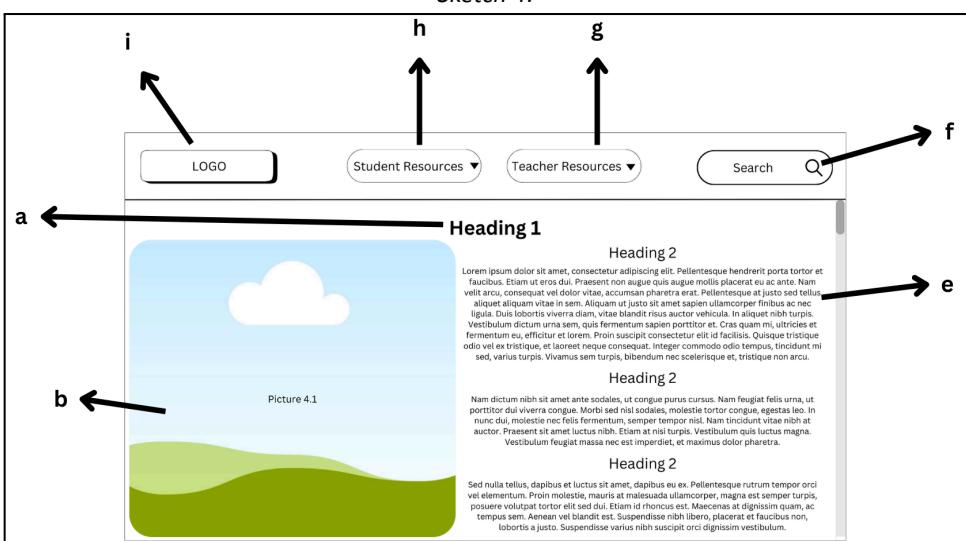
Labeling:

- A: Banner -
- B: Paragraph 1-
- C: Paragraph 2 -
- D: Quote -
- E: Heading 1-
- F: Search bar-
- G: Dropdown -
- H: Dropdown -
- I: Homepage/Logo button
-

Annotations:

- A: Banner** - A full-width graphic that visually introduces the site or topic.
- B: Paragraph 1** - Introduction to the website or key information.
- C: Paragraph 2** - Additional supporting information or a continuation of paragraph 1.
- D: Quote** - A motivational or thematic quote based on the theme and content of the page.
- E: Heading 1** - The primary title for the content section.
- F: Search Bar** - Search bar for easy content access across the website.
- G: Dropdown (Teacher Page)** - A navigation element for accessing teacher-specific resources.
- H: Dropdown (Student Page)** - A navigation element that expands to show links or sections for student-related content.
- I: Homepage/Logo Button** - Provides navigation back to the homepage while also acting as the logo of the website.

Sketch 4:



Labeling:

- A: Heading-
- B: Image/Attachment-
- E: Main content-
- F: Search bar-
- G: Dropdown -
- H: Dropdown -
- I: Homepage/Logo button
-

There is an error in labeling of the sketch. A, B, E, F, G, H, I were used in place of A, B, C, D, E, F, G

Annotations:

- A: Heading** - Title for the main content section of the page
- B: Image/Attachment** - Area for displaying static images or interactive attachments for students or teachers.
- E: Main Content** - The core informative or instructional section of the page.

F: Search Bar - Enables users to quickly search content across the site easily

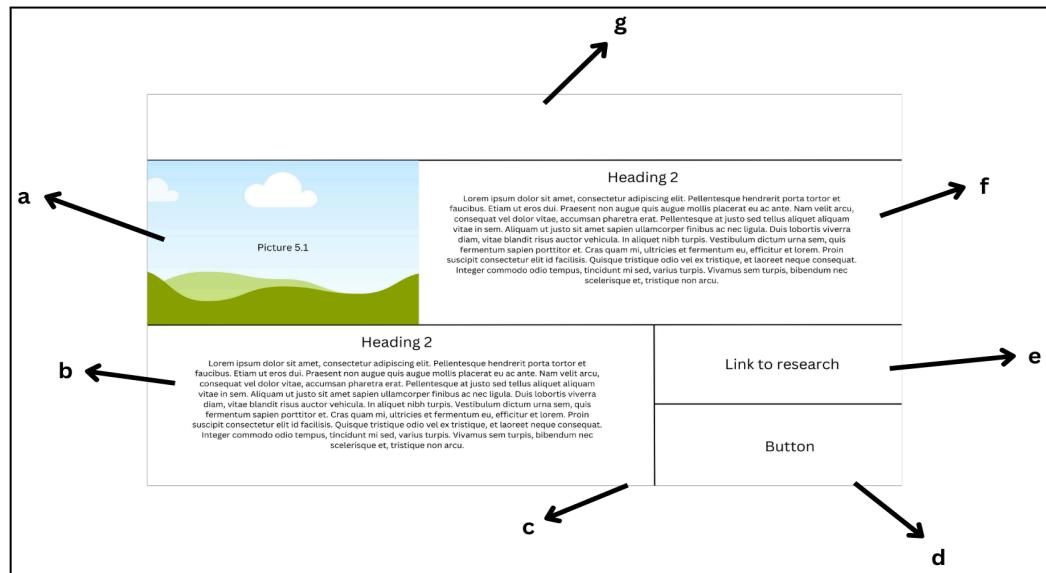
G: Dropdown (Teacher Page) - A navigation element for accessing teacher-specific resources.

H: Dropdown (Student Page) - A navigation element that expands to show links or sections for student-related content.

I: Homepage/Logo Button - Provides navigation back to the homepage while also acting as the logo of the website.

Mainpage -

Sketch 1:



Labelling:

A: Picture

B: Heading 1

C: Content 1

D: Button 1

E: Button 2 (Links to research)

F: Heading and content 2

G: Navigation bar

Annotations:

A: Picture - A static image or visual relevant to the page's theme

B: Heading 1 - Primary heading for the main content or purpose of the page

C: Content 1 - Introduction or key information section

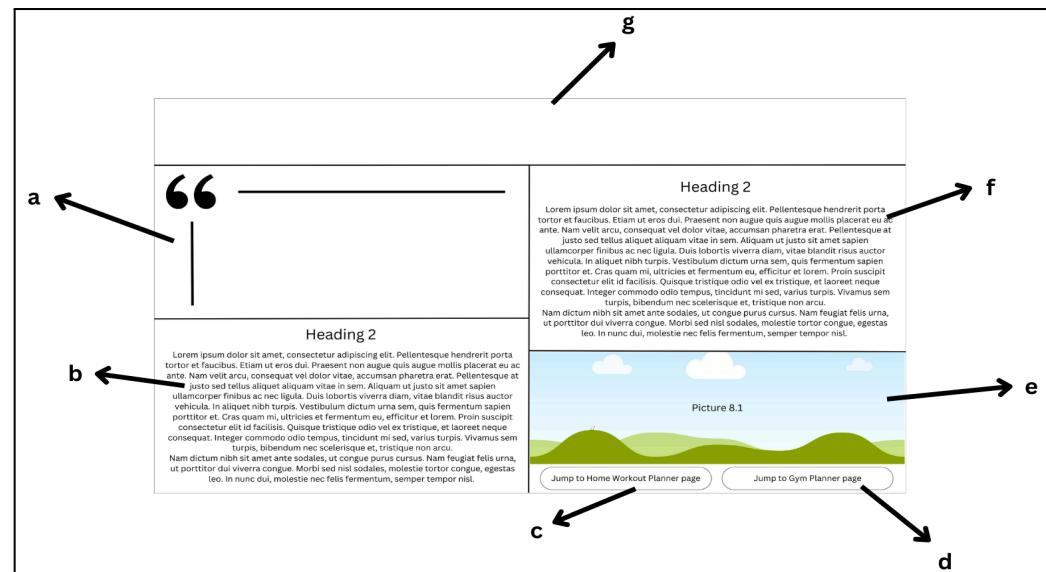
D: Button 1 - A simple button linking to additional pages or resources

E: Button 2 - Provides access to research or additional information

F: Heading and content 2 - A heading followed by secondary information to complement Content 1

G: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 2:



Labelling:

A: Quote

B: Content 1

C: Jump to subpage 1

D: Jump to subpage 2

E: Picture

F: Content 2

G: Navigation bar

Annotations:

A: Quote - Inspirational or informative text relevant to the webpage

B: Content 1 - Primary informational text providing essential details

C: Jump to subpage 1 - A button linking users directly to the first subpage for further information

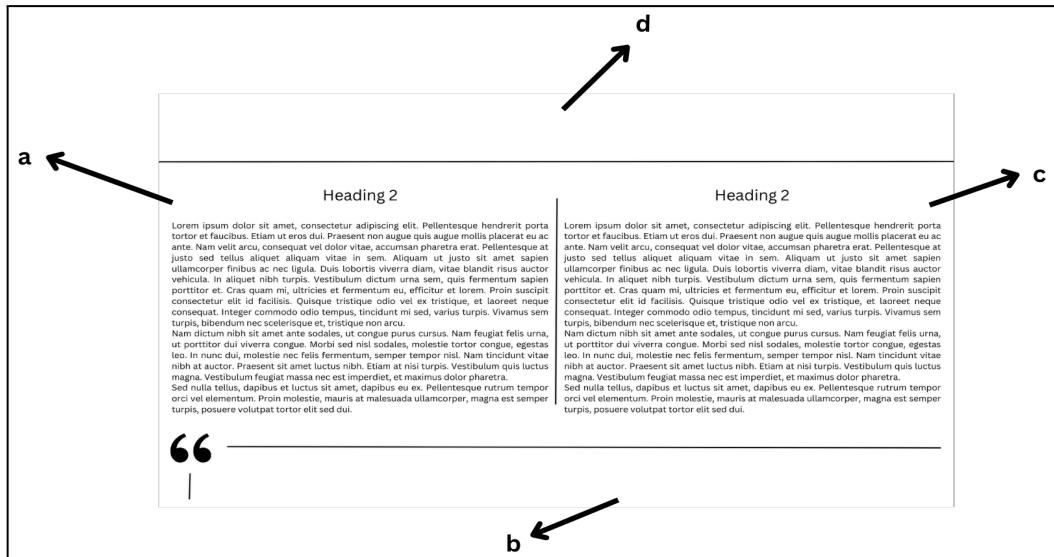
D: Jump to subpage 2 - A button linking to the second subpage for additional content

E: Picture - Visual representation to engage the audience and break up text-heavy sections

F: Content 2 - Supplementary information to provide more insights or guidance

G: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 3:



Lablleling:

A: Content section 1

B: Quote

C: Content section 2

D: Navigation bar

Annotations:

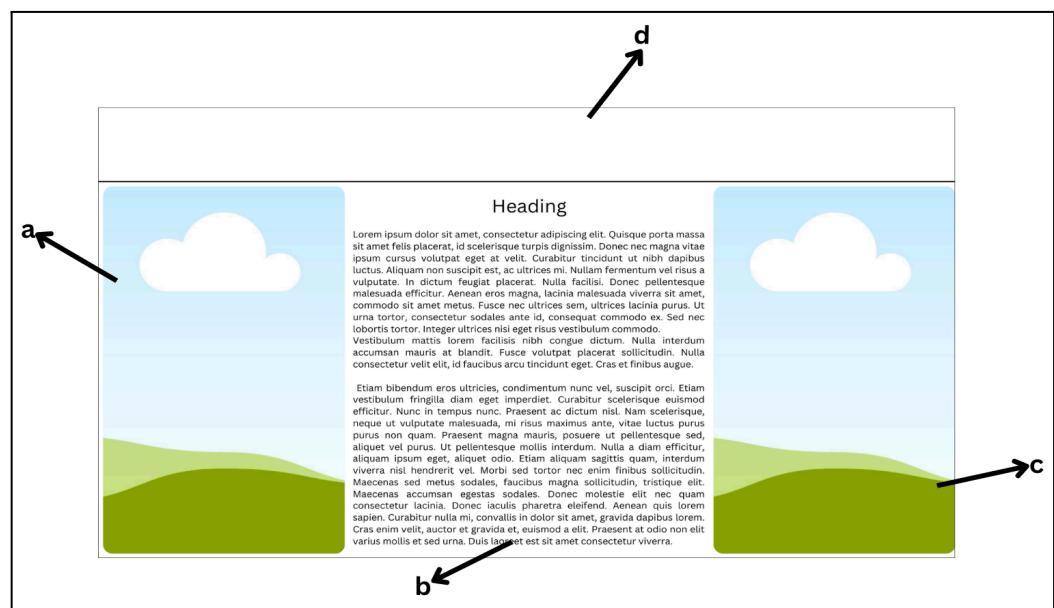
A: Content section 1 - Main information block introducing key topics or themes

B: Quote - Text providing motivation or contextual relevance to the page content

C: Content section 2 - Follow-up information elaborating on the primary content

D: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 4:



Lablleling:

A: Picture/Resource 1

B: Content

C: Picture/Resource 2

D: Navigation bar

Annotations:

A: Picture 1 - A static image element for visual appeal

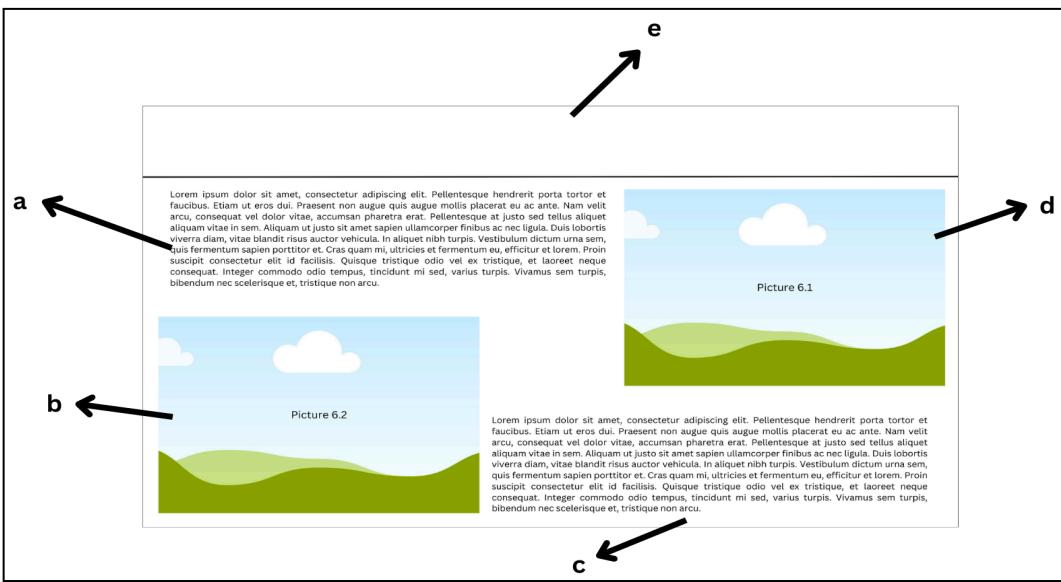
B: Content - Informative section providing explanations or insights

C: Picture 2 - A secondary static image for further engagement

D: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sub-Pages:

Sketch 1:



Lablleling:

- A: Content 1
- B: Picture/Resource 1
- C: Content 2
- D: Picture/Resource 2
- E: Navigation bar

Annotations:

A: Content 1 - Introductory or primary information section setting context for the page

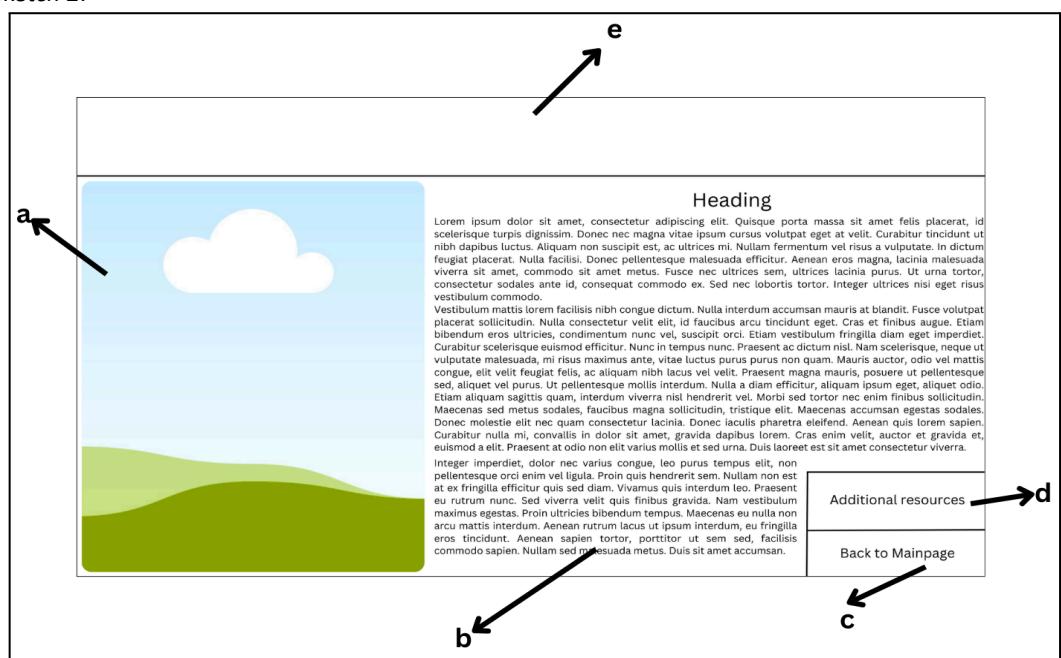
B: Picture/Resource 1 - Static image, table, or resource complementing Content 1

C: Content 2 - Follow-up section elaborating on the previous content

D: Picture/Resource 2 - Secondary visual representation or resource to support Content 2

E: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 2:



Lablleling:

- A: Picture/Resource
- B: Content
- C: Back to mainpage button
- D: Additional resources button
- E: Navigation Bar

Annotations:

A: Picture/Resource - Key image, data table, or embedded resource for user interaction

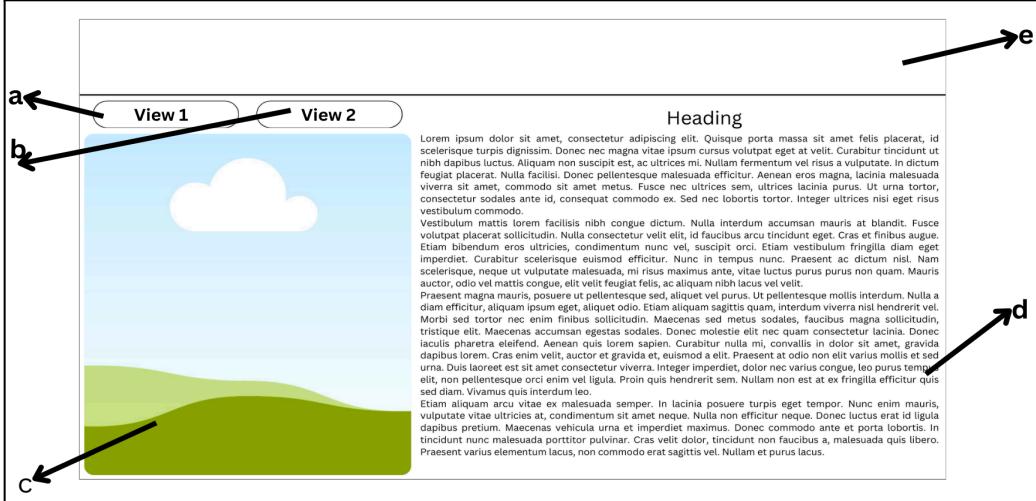
B: Content - Informative section providing explanations or insights

C: Back to mainpage button - Simple button for users to return to the main page

D: Additional resources button - Directs users to additional content or research

E: Navigation bar (empty) - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 3:



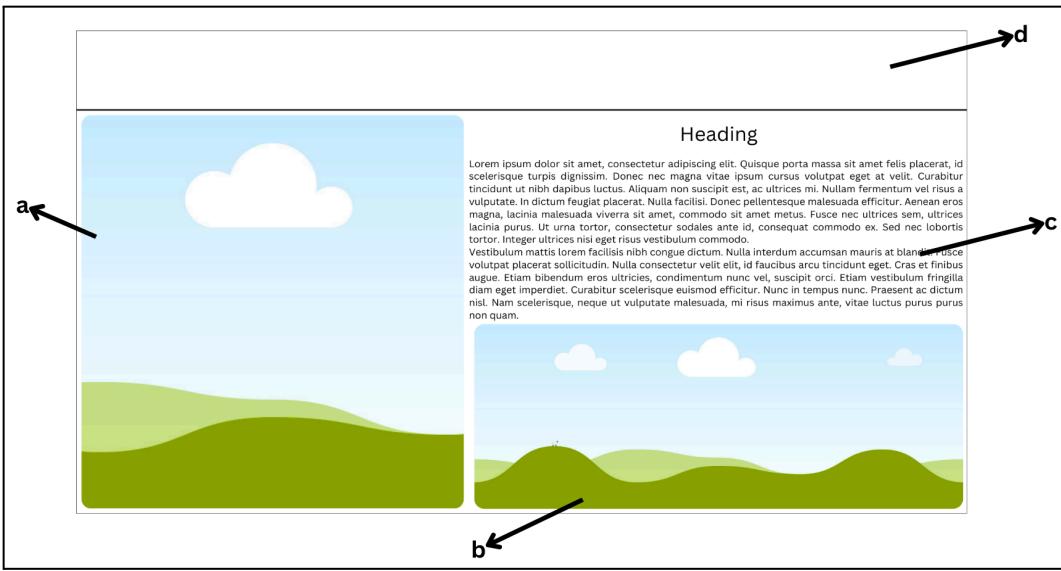
Lablleling:

- A: View 1
- B: View 2
- C: Picture/Resource
- D: Content
- E: Navigation bar

Annotations:

- A: View 1** - Button allowing users to switch to the first resource view
- B: View 2** - Button for toggling to the second resource view
- C: Picture/Resource** - Visual or tabular element displayed based on the selected view
- D: Content** - Static explanatory information displayed alongside the resource
- E: Navigation bar (empty)** - The design of the navigation bar will be chosen based on the selected mainpage design

Sketch 4:



Lablleling:

- A: Picture/Resource 1
- B: Picture/Resource 2
- C: Content
- D: Navigation

Annotations:

- A: Picture/Resource 1** - Static or interactive visual/resource relevant to the page theme
- B: Picture/Resource 2** - Secondary image or resource providing additional information
- C: Content** - Explanatory text connecting the two resources or providing insights
- D: Navigation bar (empty)** - The design of the navigation bar will be chosen based on the selected mainpage design

Criteria B.3 - Present the chosen design and justify its selection

Selecting the final design requires careful evaluation of multiple sketches across the 3 categories - the Homepage sketches, the Mainpages sketches, and the Subpage sketches. Each sketch was created with the design specifications and target audience in mind.

To find the most suitable design for each category, interviews with the target audience (students aged 14–18 and teachers) as well as fitness and education experts will be conducted. These interviews will focus on assessing the designs based on the specifications mentioned in Criteria B1. The Target audience and the experts will be asked to evaluate the sketches on key specifications - visual appeal, simplicity, functionality, and structure. (*refer to appendix B.3 for interview questions and answers*)

Based on the responses of the target audience (refer to appendix B.3), here is a table to visually represent which design they like the best: (5 - Highest, 0 - Lowest)

Target Audience Survey Table Analysis :

	Home page Sketches				Mainpage Sketchs				Sub-Page Sketches			
Aspect	H1	H2	H3	H4	M1	M2	M3	M4	S1	S2	S3	S4
Aesthetics	3	4	5	4	3	5	4	3	5	4	3	4
Layout and structure	4	4	5	3	4	5	4	3	5	4	3	4
Simplicity	4	3	5	4	4	5	3	4	5	4	3	4
Functionality	4	4	4	3	4	4	4	3	4	4	3	4
Total	15	15	19	14	15	19	15	13	19	16	12	16

Based on the table, Homepage Sketch 3 (19/20), Main Sketch 2 (19/20), and Subpage Sketch 1 (19/20) were all preferred and received the highest scores. Therefore, these 3 sketches will be chosen for the final design.

Final chosen designs:

Picture 3.1

Heading 1

“

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque hendrerit porta tortor et faucibus. Etiam ut eros dui. Praesent non augue quis augue mollis placerat eu ac ante. Nam velit arcu, consequat vel dolor vitae, accumsan pharetra erat. Pellentesque at justo sed tellus aliquam porttitor et lacinia. Aliquam ut justo sit amet sapien ullamcorper finibus ac nec ligula. Duis lobortis viverra diam, vitae blandit risus auctor vehicula. In aliquet nibh turpis. Vestibulum dictum urna sem, quis fermentum sapien porttitor et. Cras quam mi, ultricies et fermentum eu, efficitur et lorem. Proin suscipit consectetur elit id facilisis. Quisque tristique odio vel ex tristique, et laoreet neque consequat. Integer commodo odio tempus, tincidunt mi sed, varius turpis. Vivamus sem turpis, bibendum nec scelerisque et, tristique non arcu. Nam dictum nibh sit amet ante sodales, ut congue purus cursus. Nam feugiat felis urna, ut porttitor dui viverra congue. Morbi sed nisi sodales, molestie tortor congue, egestas teo. In nunc dui, molestie nec felis fermentum, semper tempor nisi.

Picture 3.1

“

Heading 2

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Picture 8.1

Picture 6.2

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Picture 6.1

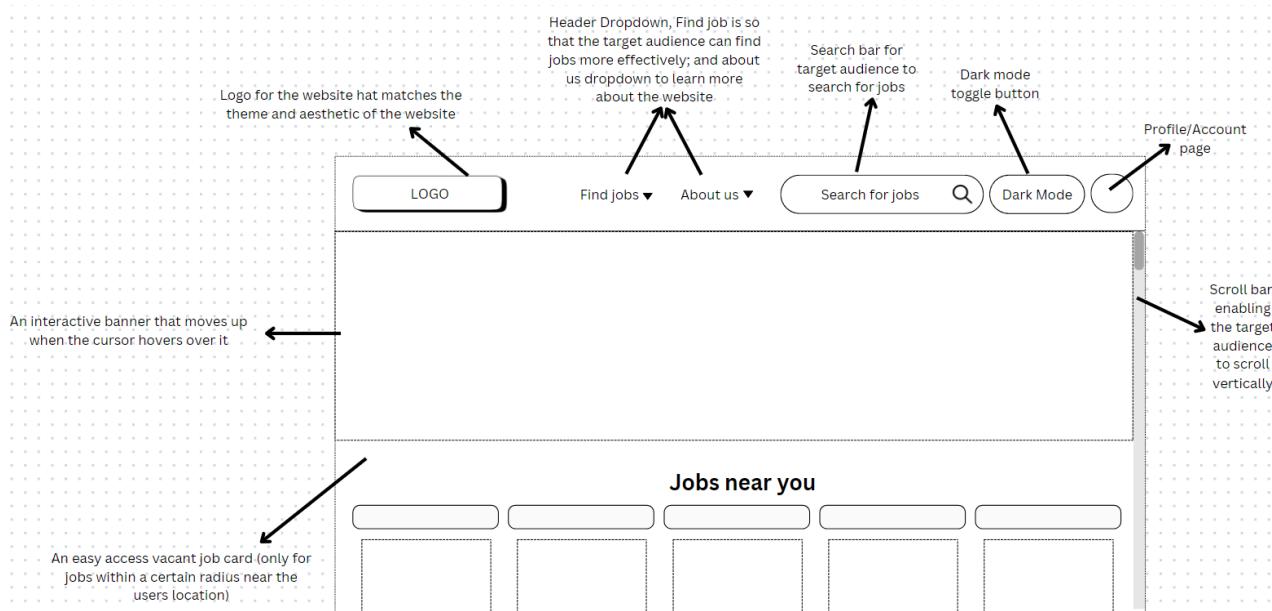
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque hendrerit porta tortor et faucibus. Etiam ut eros dui. Praesent non augue quis augue mollis placerat eu ac ante. Nam velit arcu, consequat vel dolor vitae, accumsan pharetra erat. Pellentesque at justo sed tellus aliquam porttitor et lacinia. Aliquam ut justo sit amet sapien ullamcorper finibus ac nec ligula. Duis lobortis viverra diam, vitae blandit risus auctor vehicula. In aliquet nibh turpis. Vestibulum dictum urna sem, quis fermentum sapien porttitor et. Cras quam mi, ultricies et fermentum eu, efficitur et lorem. Proin suscipit consectetur elit id facilisis. Quisque tristique odio vel ex tristique, et laoreet neque consequat. Integer commodo odio tempus, tincidunt mi sed, varius turpis. Vivamus sem turpis, bibendum nec scelerisque et, tristique non arcu.

Justification:

The final design perfectly aligns with the needs of the target audience. Students aged 14-18 who often neglect their health due to academic pressure. The text and background are in high contrast, allowing users to easily read content. Additionally, the design is very minimalist and easy to navigate, reducing the cognitive load on students who are already dealing with academic stress. The website ensures user satisfaction and aims to improve student fitness levels and encourage healthier lifestyles despite their busy schedule, with features such as Do-At-Home fitness exercises, gym workout planner, and a guide for teachers.

Criteria B.4 - Develop accurate and detailed planning drawings/ diagrams and outline the requirements for the creation of the chosen solution.

Although sketch 1 got the highest marks and is chosen, minor edits will be made to enhance the experience of the target audience. I will add a dark mode toggle button next to the search bar. This change in design has been made due to feedback I received from the target audience. Out of the 20 target audiences that I interviewed for B3, 9 have mentioned that they would like a dark mode toggle button for aesthetics. This was the only feedback I received from the target audience that concerned the design of the website. Here is the final Sketch for the website:



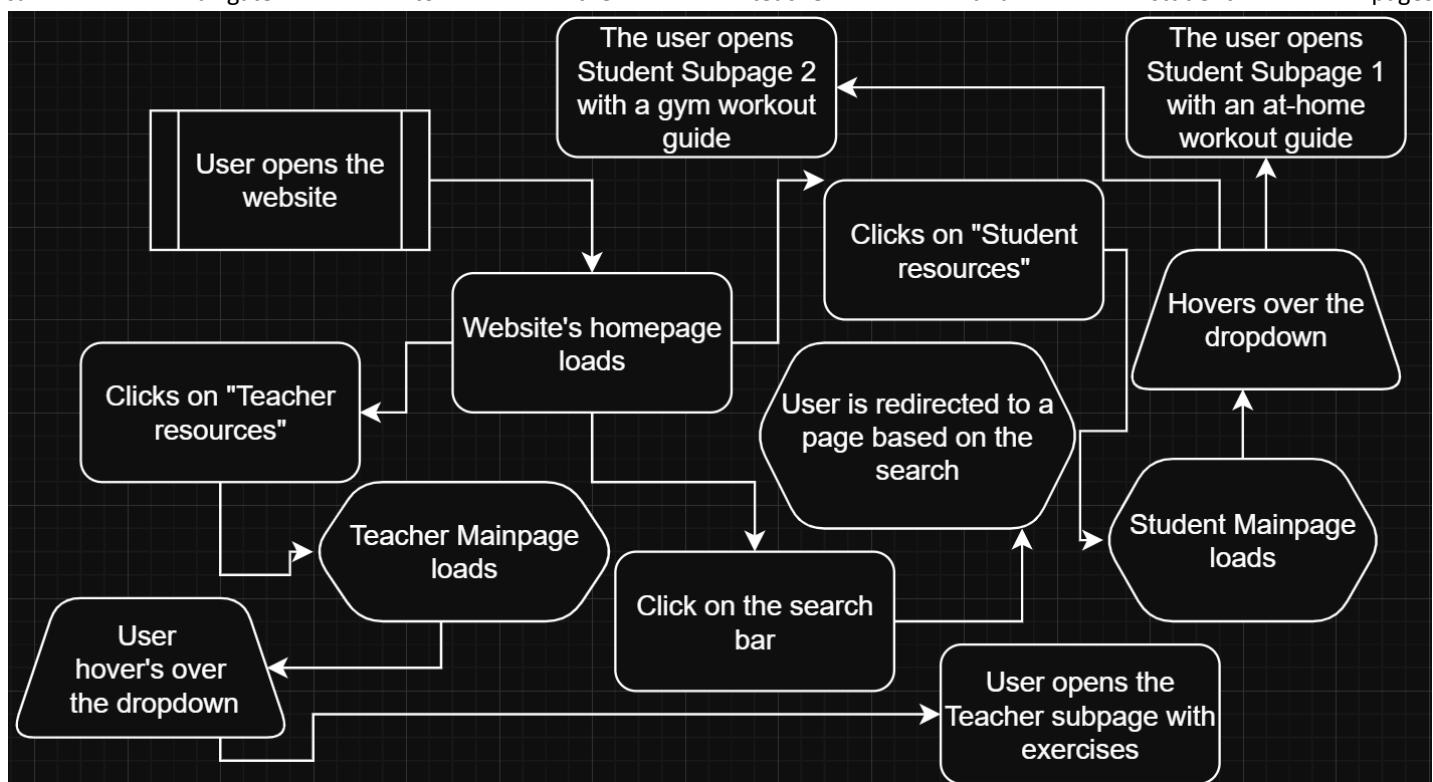
The final design is very similar to the first sketch, with the addition of Dark Mode toggle button

Requirement Table:

Catergory	Requirement	Quantity/Detail	Purpose
Hardware	Computer/Laptop	1	For coding, Designing and Testing the website
	Internet connectivity	High-speed and stable	To ensure uninterrupted access to browser, Graphic design software, management tools, Design style guide, etc.
	Keyboard and mouse	1 set	Facilitates smooth and precise input, navigation, and interaction during the development and design process.
	Mobile device	1	Used to test the website's responsiveness, functionality, and user experience across mobile platforms.
Software	Text Editor	Visual Studio Code	Provides an efficient environment for coding, debugging, and managing files during the development of the website.
	Browser	Google Chrome	Used for testing website functionality, cross-browser compatibility, and ensuring adherence to modern web standards
	Graphic design software	Canva and Adobe Xd	Aids in designing visual elements, creating wireframes, and developing a cohesive and user-friendly UI/UX.

	Testing tools	BrowserStack	Allows testing of the website across multiple browsers, devices, and operating systems to ensure compatibility and performance
Materials	Design style guide	Comprehensive document	Ensures consistency in design elements, colors, typography, and overall visual identity throughout the website
	Icons and images	The Noun Project and Unsplash	Provides high-quality visuals to enhance website aesthetics and improve user engagement and clarity
	Wireframe	Paper sketches or digital wireframes	Helps plan the website layout, structure, and navigation flow before moving into development
Other	Website hosting platform	GitHub pages or Vercel	Hosts the website online, making it accessible to users and providing an environment for deploying and updating the solution

Flowchart of website Design: This flow chart focuses on visually indicating how the design of the website will be. It shows how the user will navigate through the website, for example - When a student enters the website he will be redirected to the homepage, then can navigate to the teacher and student pages.



Criteria C.1: Construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution

Product Plan				
Phase	Sub-tasks	Description	Materials/tools needed	Time
Preparation & Setup	Download and install VS Code	Download VS Code from the official website and install it on the system to use as the primary code editor	<ul style="list-style-type: none"> - Internet connection - Web browser - VS Code Installer 	16/01/25: 1 - 2 hours
	Install necessary	Install key VS Code extensions to improve workflow:		

Product Plan

	extensions such as Live Server, Prettier, Github Copilot, and Code Spell check	Live Server for real-time preview, Prettier for formatting, GitHub Copilot for code suggestions, and Code Spell Check for any code error detection	- VS code marketplace - Git software - File Explorer/Finder	
	Install Git and set Github for version control	Install Git, create a GitHub repository, and configure Git on the system to keep track of changes and back the project up.		
	Setup local project folder on the system	Use File Explorer (Windows) or Finder (Mac) to create a structured folder for the project to keep HTML, Images, and resources organized and manageable		
Project Organization & Initial Development	Open VS code and create and create project folders	Use VS Code's built-in file explorer to generate folders for structuring HTML, CSS, JavaScript, and images in an organized manner.	- VS code - File Explorer/Finder	17/01/25: 3-4 hours
	Write the basic HTML structure for all 6 pages	Create six .html files inside VS Code and use Emmet shortcuts to quickly generate boilerplate HTML with <html>, <head>, and <body> elements	- HTML knowledge - Dummy text (Lorem Ipsum) generator - Placeholder images	
	Use Semantic HTML elements	Using <header>, <nav>, <section>, <article>, and <footer> tags to improve readability and SEO.		
	Add placeholder text, headings, and images	Insert temporary text and headings using Lorem Ipsum Generator while adding placeholder images from Unsplash to create a structure		
Page Styling & Interactivity	Write CSS code using <style>	Use the <style> tag inside each HTML file for layout and appearance	- VS code - Google fonts - Color palette generator - Chrome DevTools	18/01/25 to 20/01/25: 5-6 hours
	Define consistent fonts, colors, and spacing for all pages.	Use Google fonts for typography, define color schemes with CSS variables, and use elements such as 'margin' and 'padding'	- Javascript knowledge - JavaScript and CSS libraries	
	Write JavaScript using <Script> in the same file as HTML and CSS	Use the <script> tag in VS Code to add interactivity, including dropdown menus, hover effects, and animations. Test and debug using Chrome DevTools		
Navigation & Page Linking	Design a Navigation bar using <nav> elements	Structure a navigation menu using the <nav> tag and list-based navigation (and) to ensure clarity in page structure	- VS Code - Web Browser	21/01/25: 1.5-2.5 hours
	Link all pages using anchor tags	Use elements inside VS Code to connect all pages for seamless navigation		
	Ensure the navigation bar is consistent	Copy and reuse the same <nav> structure across all six pages for a consistent navigation bar		
	Add hover and click effects to the navigation bar	Apply CSS :hover and :active pseudo-classes to enhance user experience along with smooth transitions and color changes		
Content Development &	Write clear and structured content for all pages	Use Grammarly to refine the text and ensure well-structured, error-free content across all pages	- VS Code - Grammarly - Unsplash	22/01/25: 3-4 hours

Product Plan

Optimization	Add images, icons, and other visual elements	Insert royalty-free images and scalable vector icons from Unsplash to improve website aesthetics	<ul style="list-style-type: none"> - Canva - Font Awesome 	
	Ensure proper alignment and spacing of text and images	Utilize CSS Flexbox and Grid layouts using <style> tag to align text and pictures neatly on each page		
	Proofread content for grammar, and clarity	Review all text using Grammarly and Hemingway Editor to ensure readability and clarity before publishing the website		
Final Testing & Debugging	Check for broken links in the navigation	Use Chrome DevTools' Console tab to detect any broken links and fix incorrect <a> references	<ul style="list-style-type: none"> - VS code - W3C Link Checker - Chrome DevTools - Google PageSpeed Insights 	23/01/25: 3-4 hours
	Debug any layout or styling issues that affect the UX	Inspect elements using Chrome DevTools and modify CSS properties in VS Code to correct any misaligned components		
	Optimize loading speed	Compress large images using TinyPNG and remove unused CSS styles in VS Code for better and improved page performance and loading speed		
User Testing & Feedback Collection	Share the website with the target audience for feedback	Host the beta website using GitHub Pages and share the link with users via Google Forms to collect feedback	<ul style="list-style-type: none"> - Email - Google Docs - VS Code - LinkedIn 	24/01/25: 2-3 hours
	Gather opinions from experts	Contact experienced designers or developers through email or LinkedIn to get expert feedback for improvement		
	Organize feedback	Make an organized note of all the feedback given by the target audience and expert		
	Make necessary changes based on feedback	Use VS Code to implement changes based on collected feedback, making sure the final version of the website meets the user and expert expectations		
Deployment & Final Review	Upload all website files to GitHub Pages	Push the final project to a GitHub repository and deploy it using GitHub Pages for public access	<ul style="list-style-type: none"> - GitHub - Web Browser - Grammarly - Chrome DevTools, W3C Validator 	25/01/25: 1.5-2.5 hours
	Ensure the website is accessible from any device	Open the site on Chrome, Firefox, and Safari to test cross-browser compatibility and responsiveness		
	Check for any remaining errors before publishing	Conduct a final proofreading using Grammarly and verify UI consistency with Chrome DevTools before making the website live.		

Gantt chart of my product creation timeline:

No.	Phase	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
1	Preparation & Setup										
2	Project Organization & Initial Development										
3	Page Styling & Interactivity										

4	Navigation & Page Linking								
5	Content Development & Optimization								
6	Final Testing & Debugging								
7	User Testing & Feedback Collection								
8	Deployment & Final Review								

Criteria C.2 - Demonstrate excellent technical skills when making the solution

Skill	Description	Evidence
1	Skill 1: HTML5 Semantic Elements Usage:	
2	Skill 2: CSS Flexbox and Advanced CSS Styling:	
3	Skill 3: Asynchronous Operations with Fetch API:	
4	Skill 4: Interactive UI Animations Using GSAP:	
5	Skill 5: PHP for Backend Development:	
6	Skill 6: Debugging Using Browser Developer Tools:	
7	Skill 7: Automated Testing Tools (BrowserStack):	
8	Skill 8: Version Control Using Git and GitHub:	
9	Skill 9: Hosting Website on GitHub Pages or Vercel:	

Criteria C.3 - Follow the plan to create the solution, which functions as intended

Slippage chart of my product creation progress:

No.	Phase	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
1	Preparation & Setup	Yellow									
		Green									
2	Project Organization & Initial Development		Yellow								
			Green								
3	Page Styling & Interactivity			Yellow	Yellow	Yellow					
				Green	Green	Green	Green				
4	Navigation & Page Linking						Yellow				
							Green	Green			
5	Content Development & Optimization							Yellow			
								Green	Green		
6	Final Testing & Debugging								Yellow		
									Green	Green	

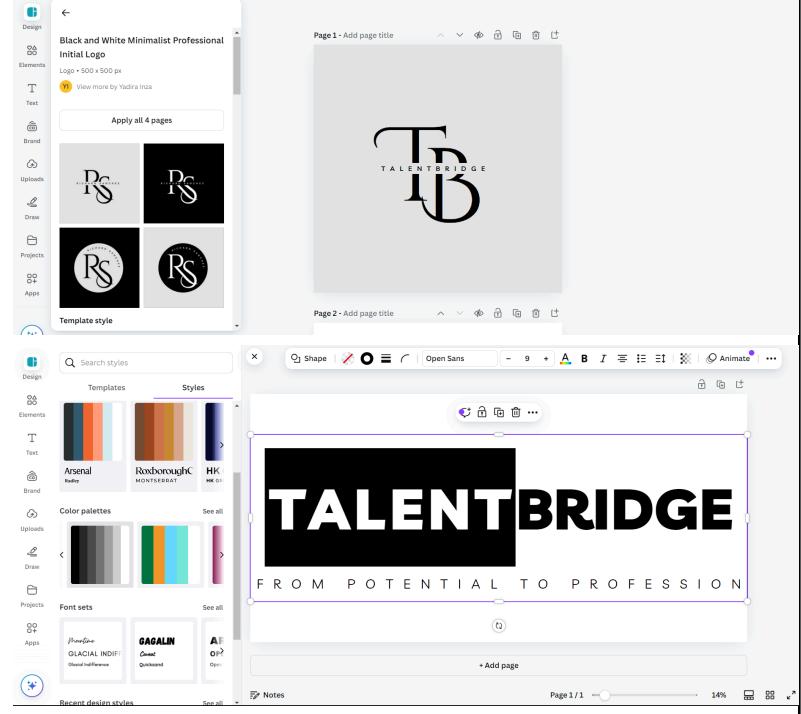
7	User Testing & Feedback Collection												
8	Deployment & Final Review												

Step	Date planned	Date completed	Task	Image
1	3/9/24	3/9/24	Write the website header, buttons, banner, login button, drop-down, and job cards using these main elements: <code><html></code> , <code><head></code> , <code><link></code> , <code><title></code> , <code><header></code> , <code><body></code> , <code><nav></code> , <code></code> , <code><div></code> , <code><p></code> , <code><h></code> , <code></code> , <code><button></code> , <code><foot></code> , <code><script></code> , <code><footer></code> , <code><style></code> , and <code><main></code>	<pre>379 </head> 380 <body> 381 382 <header> 383 <div class="header-container"> 384 <div class="logo"> 385 386 </div> 387 <nav> 388 389 390 <button class="dropdown">Find jobs</button> 391 <div class="dropdown-content"> 392 jobs near you 393 All jobs 394 </div> 395 396 397 <button class="dropdown">About us</button> 398 <div class="dropdown-content"> 399 Our Team 400 Our Mission 401 </div> 402 403 404 </nav> 405 <div class="search-login"> 406 <div class="search-icon"> 407 <svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 24 24"> 408 <path d="M15.5 14h-.79l-.28-.27A6.5 6.5 0 0 0 6.5-6.5c0-.1.01-.21-.02-.31" /> 409 </div> 410 <input type="text" placeholder="Search Jobs... "> 411 <button class="login-btn" onclick="openModal()>Login</button> 412 <button class="toggle-dark-mode" onclick="toggleDarkMode()>Toggle Dark Mode</button> 413 </div> </pre>
2	4/9/24	4/9/24	Once the HTML code elements are in place, under the <code><style></code> element start writing the CSS code using; <u>color</u> - to set text color, <u>background color</u> - to set the background color, <u>font family</u> - to set font type, and <u>font size</u> - to set the size of the text, <u>margin</u> - to set a margin around the borders, <u>width</u> , and <u>height</u> - to set the dimensions of elements, <u>position</u> - to position an element in a static location, <u>text decoration</u> - to add or remove text decoration (bold, italic, underline), <u>background image</u> - to set the properties of the background images, <u>transition</u> - to	<pre>1 <!DOCTYPE html> 2 <html lang="en"> 3 <head> 4 <meta charset="UTF-8"> 5 <meta name="viewport" content="width=device-width, initial-scale=1.0"> 6 <title>Job Search Website</title> 7 <style> 8 9 body { 10 font-family: Arial, sans-serif; 11 transition: background-color 0.3s, color 0.3s; /* dark mode transition */ 12 } 13 14 /* Dark mode styling */ 15 body.dark-mode { 16 background-color: #121212; 17 color: white; 18 } 19 20 header { 21 background-color: #f8f8f8; 22 padding: 10px 20px; 23 box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1); 24 } 25 26 body.dark-mode header { 27 background-color: #1f1f1f; 28 } 29 30 .header-container { 31 display: flex; 32 justify-content: space-between; 33 align-items: center; 34 flex-wrap: wrap; 35 } 36 37 body.dark-mode .dropdown { 38 color: white; 39 } 40 41 /* logo */ 42 .logo img { 43 width: 69px; 44 height: auto; 45 } </pre>

set transitions on the job card (hover animation), opacity - to set the opacity of an element, float - to set which part of the container an element should float in (left, right, middle) once the CSS code is finished close the element using </style>

```
3  <head>
7   <style>
48  /* Banner */
49  .banner-img {
50    width: 100%;
51    height: auto;
52    max-height: 300px;
53    object-fit: cover;
54    background-color: #eaeaea;
55  }
56
57
58  nav ul {
59    display: flex;
60    list-style-type: none;
61    position: relative;
62  }
63
64  nav ul li {
65    margin-right: 20px;
66    position: relative;
67  }
68
69  .dropdown {
70    cursor: pointer;
71    padding: 10px;
72    color: black;
73    text-decoration: none;
74    background-color: transparent;
75    border: none;
76    transition: color 0.3s ease;
77  }
78
79  .dropdown:hover {
80    color: #007BFF;
81  }
82
83  /* Dropdown */
84  .dropdown-content {
85    display: none;
86    position: absolute;
87    background-color: white;
88    border: 1px solid #ccc;
89    min-width: 160px;
}
```

```
3   <head>
7     <style>
299   @media (max-width: 480px) {
303
304     .dropdown {
305       padding: 8px;
306     }
307
308     .login-btn, .toggle-dark-mode {
309       padding: 8px 12px;
310     }
311
312     .search-login input {
313       width: 100%;
314     }
315
316     .banner-img {
317       height: auto;
318     }
319
320     .job-list {
321       display: block;
322     }
323
324     .job-card {
325       width: 100%;
326       max-width: 90%;
327       margin: 10px auto;
328     }
329   }
330
331   /* Modal Styles */
332   .modal {
333     display: none;
334     position: fixed;
335     z-index: 1;
336     left: 0;
337     top: 0;
338     width: 100%;
339     height: 100%;
340     overflow: auto;
341     background-color: □rgb(0, 0, 0);
342     background-color: □rgba(0, 0, 0, 0.4);
343     padding-top: 60px;
```

3	5/9/24	Once Both HTML and CSS code are written, to include the functionality and accessibility features, write the javascript code.	<pre> <script> /* Dark mode */ function toggleDarkMode() { document.body.classList.toggle('dark-mode'); } /* Modal */ function openModal() { document.getElementById("myModal").style.display = "block"; } function closeModal() { document.getElementById("myModal").style.display = "none"; } /* Closing modal */ window.onclick = function(event) { const modal = document.getElementById("myModal"); if (event.target === modal) { modal.style.display = "none"; } }; /* Smooth scrolling */ document.querySelectorAll('a[href^="#"]').forEach(anchor => { anchor.addEventListener('click', function (e) { e.preventDefault(); const targetId = this.getAttribute('href'); document.querySelector(targetId).scrollIntoView({ behavior: 'smooth' }); }); }); /* Form submissions */ </pre>
6	7/9/24	Open Canva>new project, and start working on a logo and banner of your choice	 <p>The image shows the Canva software interface. On the left, there's a sidebar with various tools like Design, Elements, Text, Brand, Uploads, Draw, Projects, and Apps. The main workspace shows two pages. Page 1 contains a logo consisting of stylized letters 'TB' above the text 'TALENT BRIDGE'. Page 2 contains a large banner with the text 'TALENT BRIDGE' in bold white letters on a black background, with the tagline 'FROM POTENTIAL TO PROFESSION' below it. The banner has a purple border.</p>

7	7/9/24	7/9/24	Once all the code writing and the logo and banner designing are done, test the website and use it as you are the target audience to try and find any errors or bugs in the code, if any are found go back and fix them	
8	8/9/24	8/9/24	Once you have checked the website for any bugs or errors, look for website publishing platforms that offer low-priced hosting. Then host the website. After hosting the website advertise your website so more people can access and benefit from your website	

Criteria C.4 - Fully justify changes made to the chosen design and plan when making the solution

Sn	Original plan	Changes made	Justification
1	Originally, I was going to include multiple accessibility features in the website, including dark mode, smooth scrolling, keyboard navigation, scroll to top button, screen reader, modal pop-ups,	However, most of the accessibility features were removed and only the dark mode toggle smooth scrolling, and modal pop-ups remained	Almost all of the target audience gave feedback that the website was unnecessarily dense with accessibility features that not many people will use. After getting this feedback I asked the target audience what feature I should keep and what i should remove, the majority chose

			smooth scrolling, modal pop-up, and dark mode to remain
2	Size - The original plan for to have the font style 12-calibri for normal text and 15-calibri for headings	Increased text size to 14-Calibri Instead of 18-Calibri	A few of my target audience was complaining about how small the font size is, to tackle this problem, I increased the font size so that it is easier for the target audience to see the text and headings of the website (refer to the images attached below)
3	Originally the website was simply supposed to be a platform for job seekers with physical disabilities and employers to connect	However, the website will now allow the users to upload important documents like resumes, mark sheets, disability certification, and more on the websites' cloud for easy access while looking for jobs	The hosting platform - Hostinger - has cloud storage for the websites, this cloud storage will allow the users to upload their files and documents to cloud and access at any time, I was unaware of this feature prior to making the website and did not include uploading files and documents as an original plan
4	Originally, contact details were not supposed to be shared	However, The website will now have a "contact us" webpage under the dropdown named "About us"	Providing contact details to the website users can prove to be very useful as the users can provide insightful feedback and share their experiences with us. This allows us to recognize the strengths and weaknesses of our product so that we could further improve it. These frequent updates and improvements will make sure the users keep coming back to the website and will also spread the word of this website
5	The original plan was to simply make the website and market it so that both employers and job seekers find their own way to the website.	However, instead of allowing employers to find their way to our website and post job openings, we will partner with companies.	While making the product, I realized that waiting for companies to take notice and make the effort to post job vacancies on a random website like ours over the already existing and famous websites available, is not very feasible. To counter this problem, we can reach out to certain companies that are disabled people friendly to look for partnerships. This is beneficial to both job portal and the company. The job portal will get promoted, and the company gain a diverse talent pool.

Criteria D.1 - Design detailed and relevant testing methods, which generate data, to measure the success of the solution

Specification	Testing method	Questions (if any)
Aesthetics	<p>User Observation: Users will navigate the website while being observed, then be asked what they think about the website</p> <p>Expert Appraisal: Experts in UI/UX will assess the design and provide constructive feedback.</p>	<p>Expert Appraisal:</p> <ul style="list-style-type: none"> • How would you rate the consistency of the color palette? • Is the layout easy to navigate and visually appealing? • Are the images and graphics appropriate and non-distracting?
Cost	<p>Expert Appraisal: Experts in web development will review the tools used, hosting methods, etc to verify cost effectiveness</p> <p>Field Trial: The website will be used by a sample audience for a certain amount of time to assess whether they can access the website fully without additional cost</p>	<p>Expert Appraisal:</p> <ul style="list-style-type: none"> • Are the development and hosting solutions truly cost-effective? • Is the use of free tools affecting functionality or quality? <p>Field Trial:</p> <ul style="list-style-type: none"> • Did you encounter any features requiring paid services? • Is the website accessible without additional costs to users?
Target Audience	<p>User Trials: Students aged 14-18 and teachers will use the website and complete task to check the usability</p> <p>Survey: Surveys will be distributed to students and teachers to gather insights on relevance and usability.</p>	<p>User Trials:</p> <ul style="list-style-type: none"> • Was the navigation intuitive? • Did you find the information helpful for your needs? • How engaging did you find the content? <p>Survey:</p> <ul style="list-style-type: none"> • How likely are you to use the website regularly? • Did the resources meet your expectations? • Any suggestions for improvement?
Size	<p>Performance Testing: The website will be tested for loading speed and responsiveness across various devices and browsers</p> <p>User Observation: Users will be asked to observe if they can access information quickly without excessive scrolling or delays.</p>	N/A
Function	<p>User Trials: Users will perform tasks such as navigating pages, downloading resources, using interactive elements, etc. to test functionality</p> <p>Performance Testing: The website will be tested under different devices and browsers to ensure smoothness.</p>	<p>User Trials:</p> <ul style="list-style-type: none"> • Were you able to navigate between pages easily? • Did the interactive elements work as expected? • Any features that caused confusion?
Security	<p>Expert Appraisal: Cybersecurity experts will assess the website for secure links, input validation and safe hosting</p> <p>Performance Testing: Automated security tests will check for vulnerabilities</p>	<p>Expert Appraisal:</p> <ul style="list-style-type: none"> • Are there any vulnerabilities in input validation? • Were there any broken or unsafe links? • How secure is the hosting solution?
Technical Skills	<p>Expert Appraisal: Web development experts will access code structure, resource optimization and responsiveness</p>	<p>Expert Appraisal:</p> <ul style="list-style-type: none"> • How optimized is the code for performance?

	Integration testing: Expert will evaluate how different parts of the code interact with each other to make sure they is a clear flow	<ul style="list-style-type: none"> Were best practices followed for development?
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Specification	Testing method used	Success criteria	Results	Specification achieved?
Aesthetics	User Observation, Expert Appraisal	Average user rating $\geq 4/5$	Average rating: 4.3/5	Yes <input checked="" type="checkbox"/>
Cost	Expert Appraisal, Field Trial	100% free tools/resources used	Verified all tools were free	Yes <input checked="" type="checkbox"/>
Target Audience	User Trials, Survey	80%+ users find site relevant	85% found content relevant	Yes <input checked="" type="checkbox"/>
Size	Performance Testing, User Observation	Minimal scrolling, quick load (<2s)	Average load: 1.8s	Yes <input checked="" type="checkbox"/>
Function	User Trials, Performance Testing	90% task success rate	93% task completion	Yes <input checked="" type="checkbox"/>
Security	Expert Appraisal, Performance Testing	No security warnings/errors	No issues found	Yes <input checked="" type="checkbox"/>
Technical Skills	Expert Appraisal, Field Trial	Fast loading & responsive design	Passed all criteria	Yes <input checked="" type="checkbox"/>