Master Challenge Website Redesign for targeted UI and UX design enhancements.

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This thesis aims to improve the user interface (UI), and user experience (UX) of the Master Challenge website through website design enhancements. This includes creating a user-centric design prototype that allows intuitive navigation and targeted user experience, to improve the user experience and user interface.

Master Challenge is an online platform that aims to close the gap between university and industry. The platform allows universities to easily integrate real-life company challenges into their courses. This practice combines practical industry challenges with academic learning by providing challenge-based learning (CBL). However, they face many barriers in the educational market, it is difficult to find the right people at universities, the time to get started is very long and some universities are not ready to organize CBL at scale. The project was created due to the need of an improved for clearer and more intuitive navigation, the visual design needs to be enhanced, the clarity of the purpose needs to be communicated, and the website needs to be tailored to user needs. These enhancements support collaborations between university and industry partners, and addressing the needs of students, educator's and companies involved in CBL. UI and UX strategies were developed and implemented to make the website user-friendly and engaging. The research question identified to improve the website design was: How can the user interface and user experience of the Master Challenge platform be improved through targeted website enhancements?

To improve the Master Challenge website design thinking methodology was used in order to have a solution-based approach to solve the current design issues. The project first included a literature review to understand the potential of challenge-based learning for changing educational outcomes, key web design principles, UX/UI strategies, and trends in educational technology. To understand how to create user-centric websites that will meet users' needs to ensure the re-design effectiveness. Furthermore, a stakeholder analysis was be conducted to deeply understand the needs, pains, and wants of users to find opportunities for the website. Demographics were conducted to target users, and empathy maps were created to empathize with user's. Lastly, the main competitors were evaluated to find opportunities for differentiation with a SWOT analysis. Furthermore, a brand analysis was added to ensure the redesign aligns with Master Challenge's goals, values and mission. To address the UI and UX problems the current design was analysed. To continue, data was collected with interviews to identify what are opportunities to re-design according to user needs and identify current issues to complement the current design analysis. Based on the research, a requirements list was made to set clear design goals. Design collages were developed and the redesign was ideated. Lastly, according to the findings, the redesigned prototype was developed. Intermediate results indicated that the redesigned prototype effectively addressed user needs, providing improved UX and UI design elements.

The current research aimed to identify how the user interface and user experience of the Master Challenge platform can be improved through targeted website enhancements. Several improvement aspects were identified, to start the design needs to prioritize user needs and wants. Therefore, the design must be user-centred, and the content and interaction must suit the user's needs. Further, the

navigation was modified for intuitiveness, users need to find information quickly and perform tasks with minimal effort. This includes having clean layouts, familiar navigation elements, and logically structured links. To continue, the brand identity was communicated to the user with messages, success stories, testimonials, and detailed guides. Furthermore, the visual design was improved for visual appeal, therefore the use of more aesthetically pleasing and functional design elements like the use of more whitespace, and having more interactive content. Additionally, the user flow on the website was improved to reduce the number of steps users take while performing certain tasks. Adding more interactive elements improved the website, adding videos and helped users understand processes and make informed decisions. Moreover, the consistency was improved across the platform, for layouts, colours, and terminology, to reduce the cognitive load for users and allow users to recognize rather than recall. Lastly, more visuals were used in the website to improve the platform, to attract users' attention to information and not overload them. Time was a limitation for the redesign, there was a need for finding users and collecting more data. Additionally, the scope of the project did not cover log-in pages.

The research question was answered by developing a user-centric redesign of the Master Challenge website, improving UI and UX to meet user needs. For future recommendations, testing the prototype with the primary stakeholders and making sure each aspect suits their needs is necessary. Additionally, adding feedback options to the website, to collect continuous data from users to meet their needs and make informed design decisions. Furthermore, allowing stakeholders to communicate on the log-in pages instead of having to send emails. Lastly, using a project management tool on the log-in pages for easy workflow management. By implementing these recommendations, Master Challenge can further improve user engagement and satisfaction, supporting the broader objective of promoting challenge-based learning.



