**Project Proposal**

**Wasptio Organisation March 03, 2023**

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University: Bennett University

Degree: Bachelor of Technology(CSE-Cyber Security)

How many hours will i work per week: 25 hours

Other Commitments: Exams, Projects

**Title:** **Stroke Patient Physical Rehabilitation in Mixed Reality**

**What excites me to work at wasptio?**

First, working for a company that provides an innovative solution to an important social problem can be rewarding. In this case, the company's platform could help improve access to healthcare services in Africa, which could have a positive impact on people's lives.

Second, working for a company that utilizes technology to address societal challenges can be exciting because it provides an opportunity to work on cutting-edge technologies and solutions that could make a significant impact.

Third, working for a company that connects multiple stakeholders in the healthcare industry, such as doctors, laboratories, and pharmacies, can be exciting because it requires collaboration, communication, and problem-solving skills to build a platform that works seamlessly for all users.

Overall, working for a company that provides a solution to a critical social issue, utilizes innovative technologies, and requires collaboration and problem-solving skills can be exciting and fulfilling.

**Overview:**

Stroke is a debilitating condition that affects millions of people worldwide. Traditional physical rehabilitation methods can be monotonous and tedious, leading to reduced patient motivation and progress. This project aims to develop a mixed reality (MR) platform for stroke patient physical rehabilitation that is immersive and interactive, with the goal of improving patient outcomes and increasing patient engagement in the rehabilitation process. As a fellowship applicant, I will have the opportunity to contribute My expertise and experience to a cutting-edge project that has the potential to make a significant impact in the field of healthcare technology.

**Objectives:**

• Work with the project team to develop a mixed reality platform for stroke patient physical rehabilitation.

• Contribute My expertise and experience to the design and development of interactive elements and gamification features to increase patient engagement and motivation.

• Assist with user testing and feedback gathering.

• Participate in project meetings and collaborate with team members to ensure the successful development of the platform.

**Methodology:**

The project will be developed using a combination of programming languages and tools, including Flutter, HTML, CSS, React, Node.js, Python, and C++. As a fellowship applicant, I will work alongside other team members to develop and integrate interactive elements and gamification features into the platform. I will also have the opportunity to participate in user testing and feedback gathering, and collaborate with team members to ensure that the platform meets the needs of stroke patients and healthcare providers.

**Timeline:**

The project timeline will be determined by the project team, but as a fellowship applicant, I can expect to participate in the project for a set period of time. My exact timeline will depend on the specific requirements of the project and the availability of other team members.

**Expected Outcomes:**

As a fellowship applicant to this project, I will have the opportunity to contribute My expertise and experience to a cutting-edge project that has the potential to improve the lives of stroke patients. I will also have the opportunity to learn new skills in software development, user experience design, and healthcare technology. By contributing to the development of a platform that is engaging and effective, I will be making a significant contribution to the field of healthcare technology.

**Conclusion:**

The "Stroke Patient Physical Rehabilitation in Mixed Reality" project is an exciting opportunity to make a significant impact in the lives of stroke patients by developing a platform that is engaging and effective. As a fellowship applicant, I will have the opportunity to contribute My expertise and experience to a cutting-edge project and make a significant contribution to the field of healthcare technology.

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| **WEEK** | **GOAL** | **RESULT** |
| WEEK 01-02 | Establish a clear project plan and timeline, and define project goals and objectives. | Detailed project plan, including milestones and deliverables, and clearly defined project goals and objectives. |
| WEEK 03 - 04 | Conduct user testing sessions with stroke patients and healthcare providers to gather feedback and refine the platform design. | Feedback from user testing sessions and a platform design that has been refined based on user feedback. |
| WEEK 05 - 06 | Develop interactive elements and gamification features to increase patient engagement and motivation. | A functional platform with interactive elements and gamification features that increase patient engagement and motivation. |
| WEEK 07 - 08 | Conduct thorough testing of the platform to identify and fix any bugs or issues, and optimize it for performance and usability. | A stable, high-performing platform that is easy to use and navigate. |
| WEEK 09 - 10 | Conduct final testing of the platform with stroke patients and healthcare providers, and make final refinements based on feedback. | A platform that has been thoroughly tested and refined to meet the needs of stroke patients and healthcare providers. |
| WEEK 11 - 12 | Develop user manuals and other documentation to support the use and maintenance of the platform, and prepare for project handoff to stakeholders. | User manuals and other documentation to support the use and maintenance of the platform, and a successful project handoff to stakeholders. |

**What makes me the best person to execute this project?**

Based on My previous experience and skills, here are some qualities that make me a good candidate to execute this project on stroke patient physical rehabilitation in mixed reality (MR) in collaboration with Stanford Medical Center:

Technical expertise: My experience as a Flutter and ReactJS developer and knowledge of HTML, CSS, JavaScript, and NodeJS suggest that I have the technical expertise required to develop a mixed reality (MR) application.

Experience in developing mobile applications: My experience in developing mobile applications using Flutter and ReactJS could be valuable in developing a mixed reality (MR) application that runs on mobile devices.

Familiarity with MR technologies: My experience as a machine learning intern suggests that I have an understanding of advanced technologies, such as mixed reality, which could be helpful in developing a physical rehabilitation application in MR.

Collaboration skills: The project involves collaborating with Stanford Medical Center, which requires effective communication, collaboration, and teamwork. My experience as a technical lead and full-stack developer suggests that I have developed collaboration skills, which could be helpful in executing the project successfully.

Problem-solving skills: Developing a physical rehabilitation application in MR involves several challenges, and the ability to identify and solve problems is essential to executing the project successfully. My experience in developing multiple projects suggests that I have developed this skill.

Overall, My technical expertise, experience in developing mobile applications, familiarity with MR technologies, collaboration skills, and problem-solving skills make me a strong candidate to execute the project successfully in collaboration with Stanford Medical Center. However, it's important to note that the project may require additional skills, such as medical knowledge, and it's essential to work closely with the experts from Stanford Medical Center to ensure the project's success.