

Django

VR Controller

Designing Game controllers for Hand Amputees and Other Impairment

Introduction

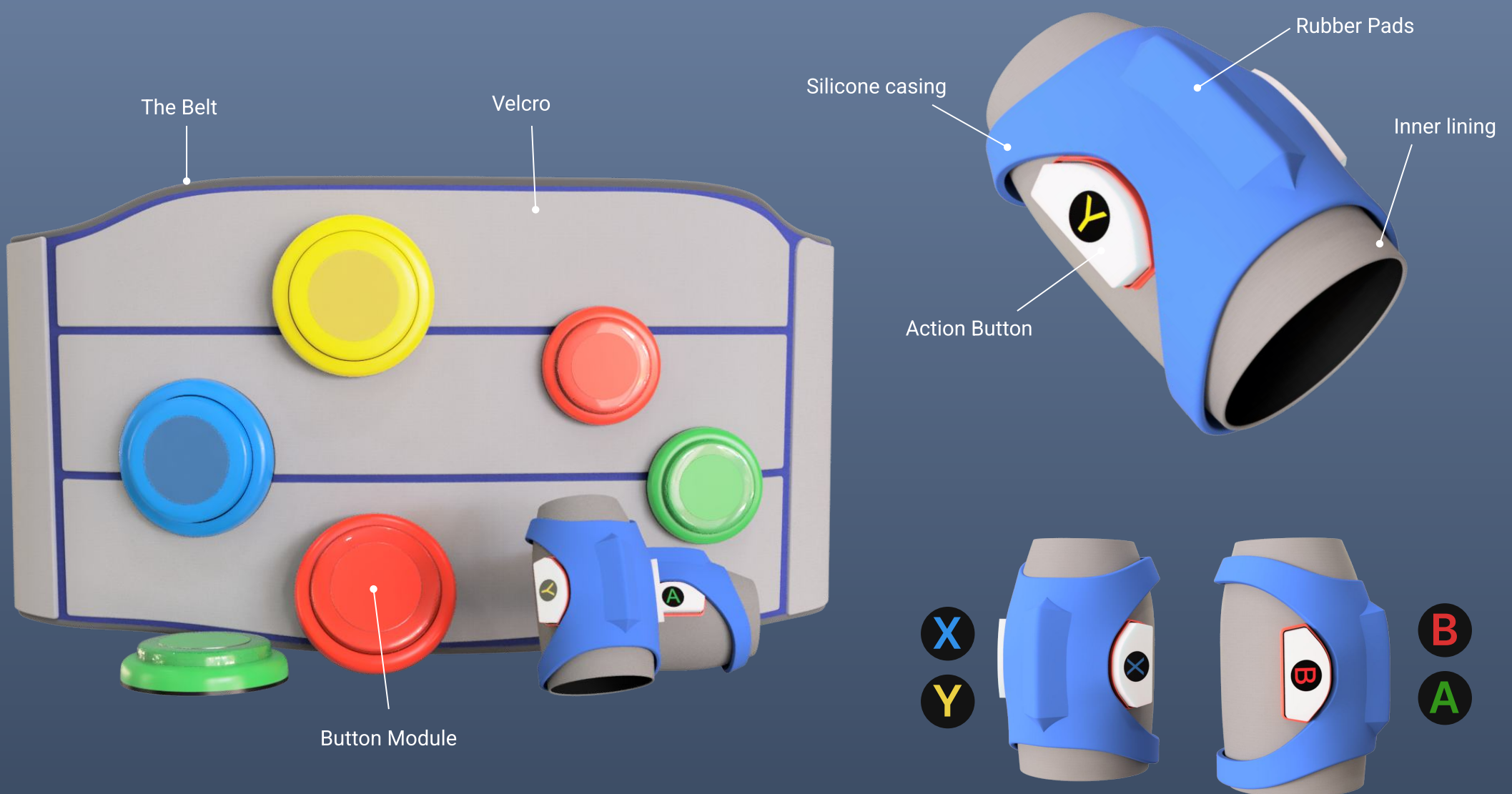
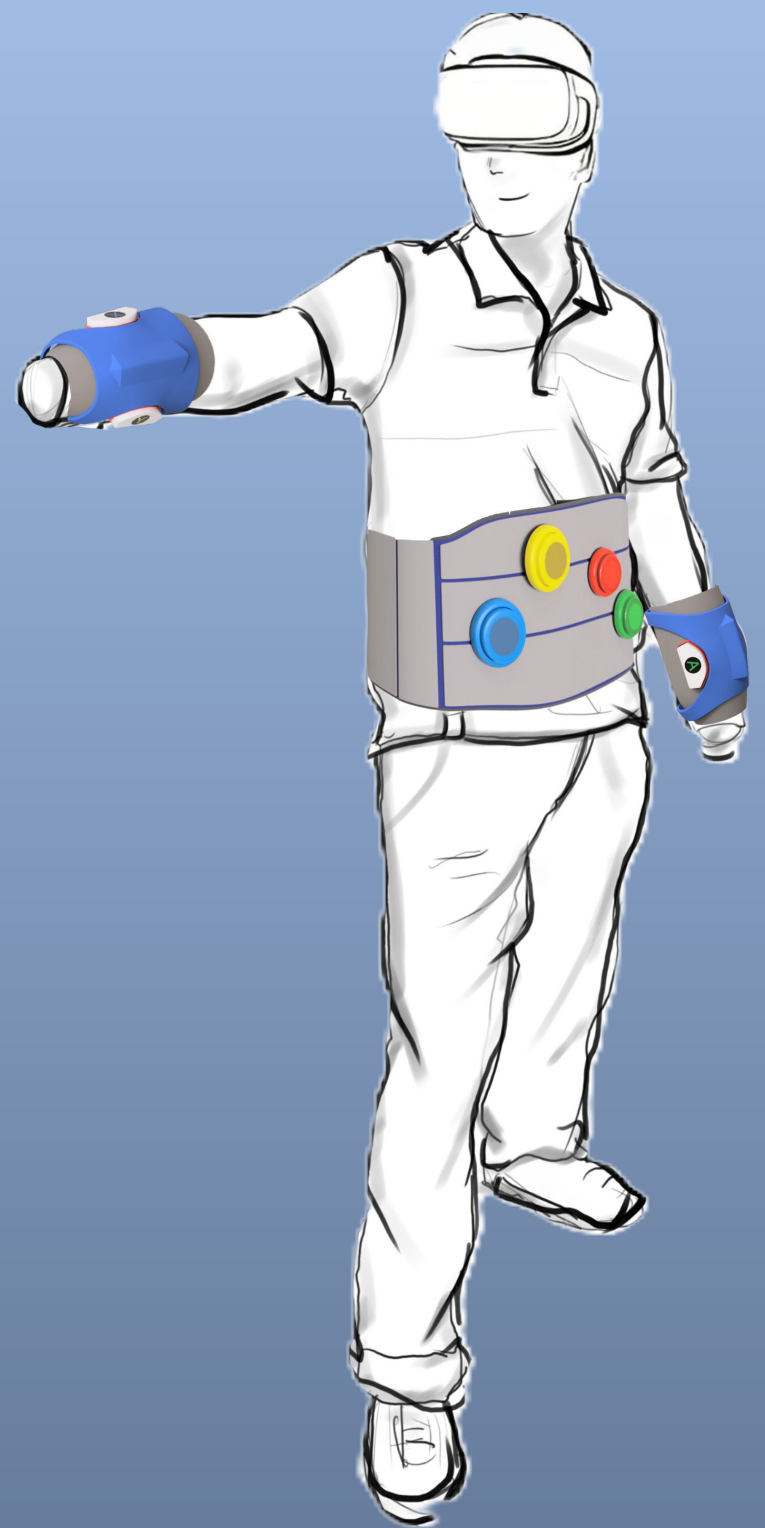
Virtual Reality (VR) is becoming increasingly dominant in both gaming and professional applications. However, current VR systems often fail to accommodate users with hand impairments, limiting their ability to fully engage with these immersive experiences. This project aims to bridge this gap by developing a VR controller specifically tailored for users with hand amputations.

Problem Statement

Despite significant advancements in VR technology, accessibility remains a critical challenge. Most VR controllers are designed with the assumption of full hand mobility, which excludes a considerable portion of potential users. There is an urgent need for inclusive designs that ensure all users, regardless of physical ability, can participate fully in VR.

Key Features

- **Modular Design:** Detachable button modules allow users to customize the layout according to their comfort and specific needs.
- **Adaptable Controls:** The controller is designed for both single-handed and dual-handed users, featuring intuitive, easy-to-reach buttons that require minimal force.
- **Accessible Design:** Specifically engineered to be usable by individuals with bilateral hand amputations, including those with trans-radial amputations.



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