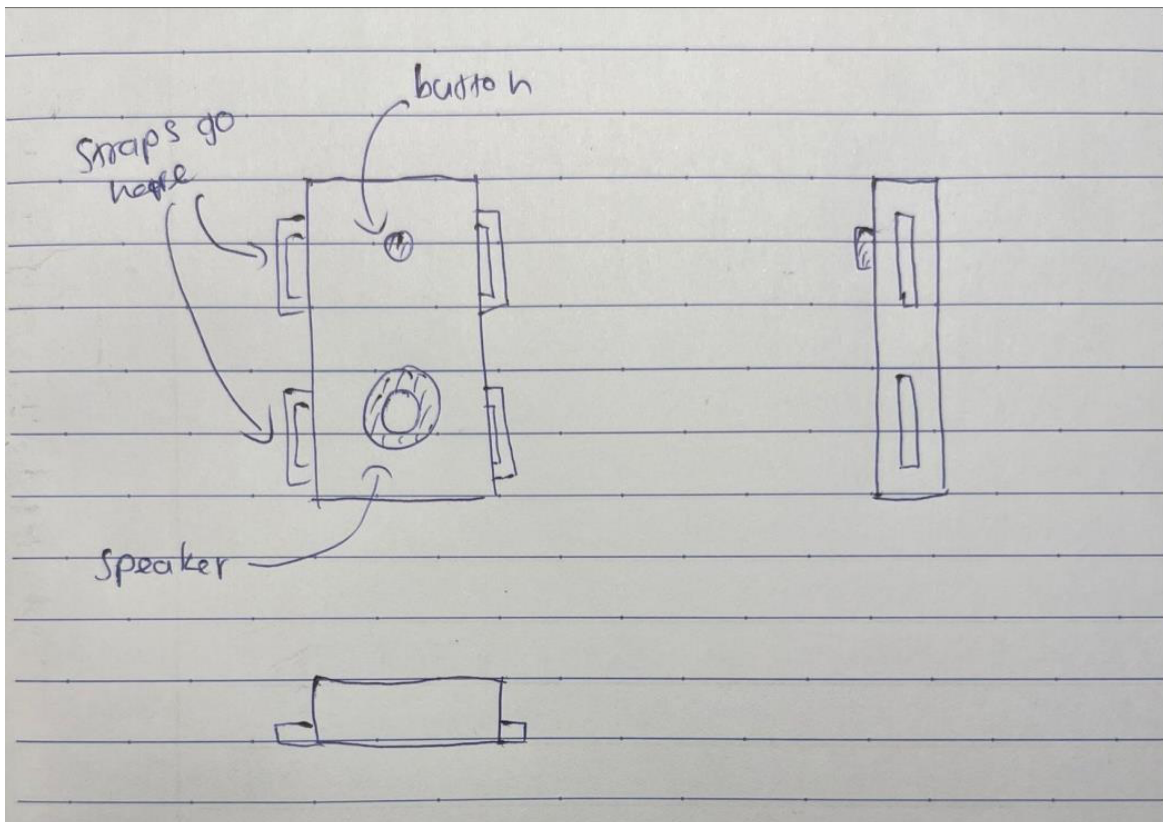


"BEATBOX" - DESIGN CONCEPT DOCUMENT

1. General information

- **Concept name:** BEATBOX
- **Intended users:** People with interest in boxing and kids
- **Purpose:**
 - + Change boring boxing training sessions into interesting and meaningful time.
 - + Enhance workout productivity and user's experience.

2. Concept visualization



3. Storyboard



4. Functionalities and features

- **Intelligent Impact Sensors:** The BeatBox is equipped with state-of-the-art impact sensors that analyze your punches in real-time. Get instant feedback on your power and speed to optimize your training sessions.
- **Personalized Training Programs:** Say goodbye to generic workouts! Our BeatBox pairs seamlessly with a dedicated app, tailoring training programs based on your fitness goals and skill level. Whether you're a beginner or a seasoned pro, this glove adapts to your needs.
- **Real-time Performance Metrics:** Dive into detailed performance metrics after each session. Analyze your punches, track improvements, and celebrate your victories as you embark on your fitness journey.

- **Comfortable and Durable Design:** Crafted with comfort in mind, the BeatBox features a sleek and ergonomic design. The durable materials ensure it can withstand even the toughest workouts.

5. Key findings and research

- The benefits of shadowboxing:

+ Functional exercise that can build muscle and burn fat, since it requires no gym membership and no equipment [1].

+ Improved form and technique [2].

+ Enhanced balance

- The boredom of traditional boxing training:

+ Laborious and tedious for people practicing boxing, as it requires punching into the air over and over again.

+ *"I find myself in a daydream throwing punches and moving about without any commitment or real enjoyment" [3]*

References:

[1] Croom, A. M. (2023). The Physiological and Morphological Benefits of Shadowboxing. PhilArchive. URL: <https://philarchive.org/archive/CROTPA-14>

[2] Duquette, Tommy. "Why You Should Start Shadowboxing." FightCamp Blog, November 26, 2020, <https://blog.joinfightcamp.com/training/why-you-should-start-shadowboxing/>

[3] MrBumbocart. (2013, August 10). How to Make Shadow Boxing and Heavy Bag More Enjoyable. BoxingForum24. URL: <https://www.boxingforum24.com/threads/how-to-make-shadow-boxing-and-heavybag-more-enjoyable.485503/>

