

Diverse Makers



**Daniel
Minichetti**
Team
Leader



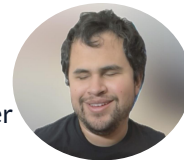
**Kane
Davidson**
Architect



**Eduardo
De La Rosa**
QA



**Elleana
Negrelli**
Recorder



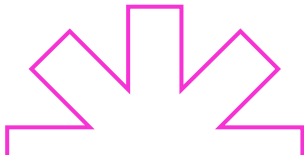
**Aaron
Ramirez**
Customer
Communica
tor



CS Faculty
Michael
Leverington



**Capstone
Mentor**
Vahid
Nikoonejad Fard



Increasing STEM Accessibility

- Unfortunately learning opportunities in STEM aren't equally accessible to those with disabilities
- Makerspaces offer hands-on STEM learning outside school
- Our project, led by Dr. Jared Duval aims to build a collaborative mobile app used between makers and disabled individuals



Jared Duval
Assistant Professor - SICCS NAU
Director of Playful Health Technology Lab



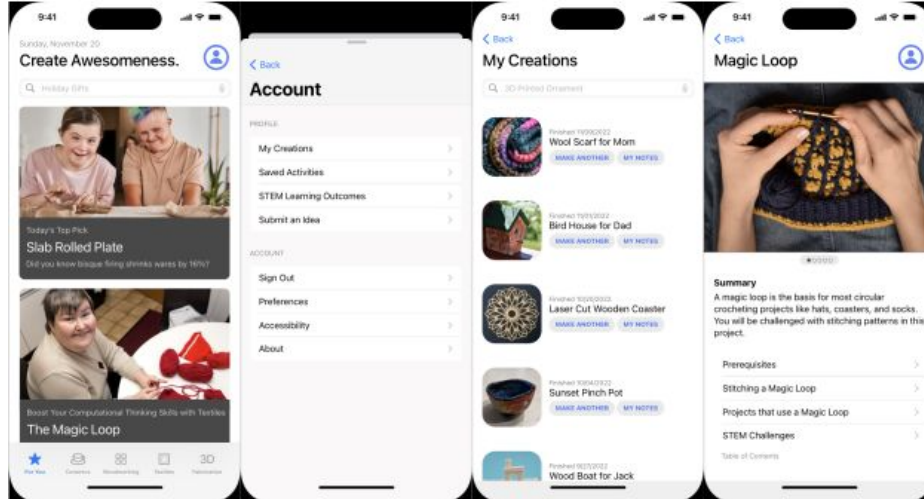
Issues in STEM Accessibility



- **Limited Access to Makerspaces**
 - Many makerspaces are not physically accessible to individuals with disabilities
- **Lack of Learning Resources**
 - Current STEM materials and maker project guides do not cater to diverse learning needs
- **Social Isolation in STEM**
 - Those with disabilities face social barriers leading to a lack of community
- **Technological Barriers to Entry**
 - Existing software products are not designed with accessibility in mind

Making STEM More Accessible

- Our crowdsourced mobile application will act as a centralized hub for sharing STEM projects, resources, and training for people with disabilities.
- Our primary objective is to provide enjoyable, accessible, intuitive, and valuable tools to disabled populations, which will help improve STEM learning outcomes.





Development Plans



- **Monthly Client Meetings**
 - Ensure alignments and discuss project objectives
 - Identify and develop a plan to tackle larger development challenges
- **Technical Challenges**
 - Creating a user friendly experience for disabled individuals
 - Multimedia integration within the app
 - Developing a cross-platform mobile application utilizing Flutter or React Native
- **Our Plan**
 1. Create early conceptual models for layout and architecture of the app
 2. Create UML diagrams to visualize structure of project
 3. Communicate with stakeholders to better refine our goals



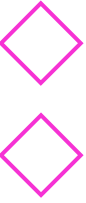


Recap



- Learning opportunities in STEM are not equally accessible to disabled populations.
 - Limited access
 - Lack of learning resources
- Our application will act as a central hub and will provide learning resources to disabled people.
- We will consult and engage with disabled people throughout our development process in order to gain a better understanding of the application requirements.
- This project will improve STEM learning outcomes by providing accessible and valuable tools to those who need it.





Thank you!
Any Questions?

