



uOttawa

# ICE CUBE

GNG2101 - A8

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# Agenda

- Background: Who? What? Why? How? & Specs
- Benchmarking: Other Designs
- First Prototype: 3D CAD
- Client Feedback: Positive and Negative Feedback
- Our Design: Why Ours?
- Business Plan: Making Money
- Knowledge Gained: What we Learned

# Background

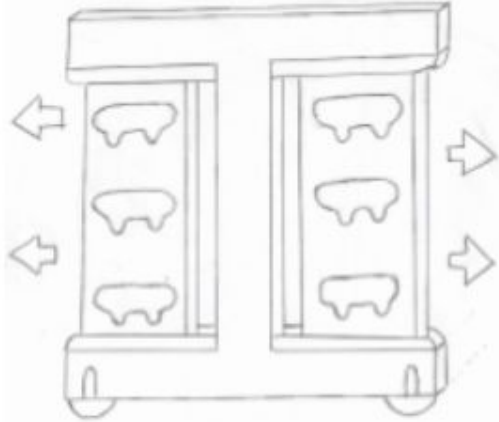
- David is our client and his son, Liam, has Hypotonia
- Dream of skating down Rideau Canal
- Needs:
  - 360 degree protection
  - Light
  - Easily transportable
  - Injury prevention (catch the user)



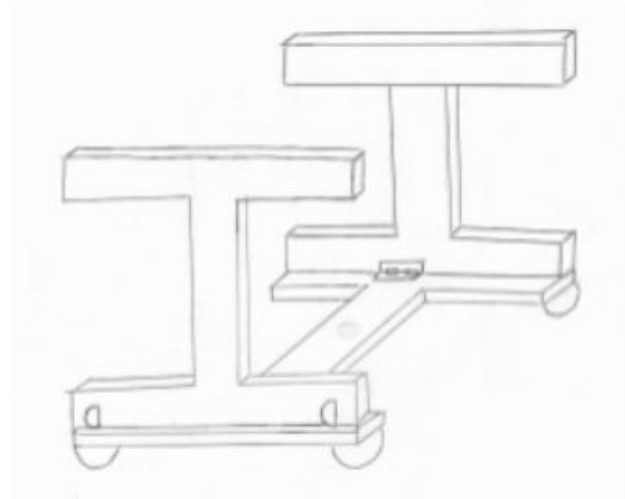
- **Problem statement:** Kids with disabilities are discouraged to participate in sport/recreational activities because of the lack of appropriate assistive equipment, our task was to design and create a skating aid to allow Liam to skate on the canal without fear of injury



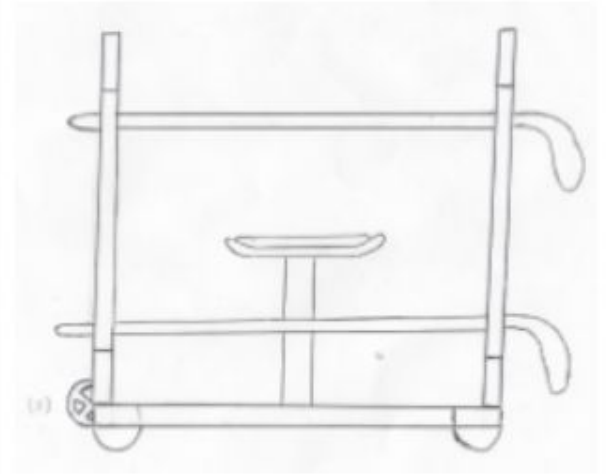
# Initial Concept Design



Front View

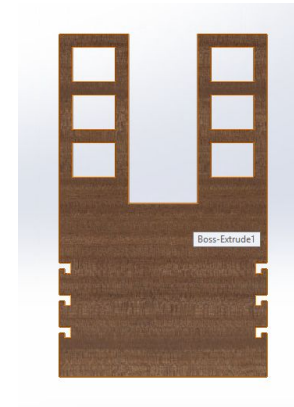
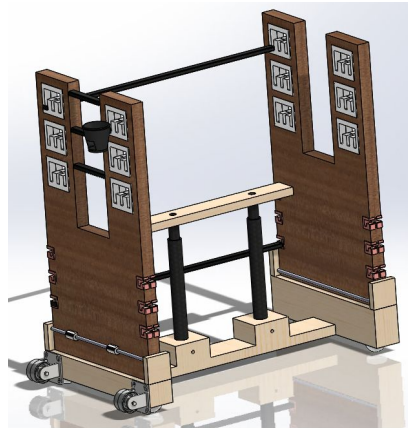


Orthographic View



Side View

# First Prototype

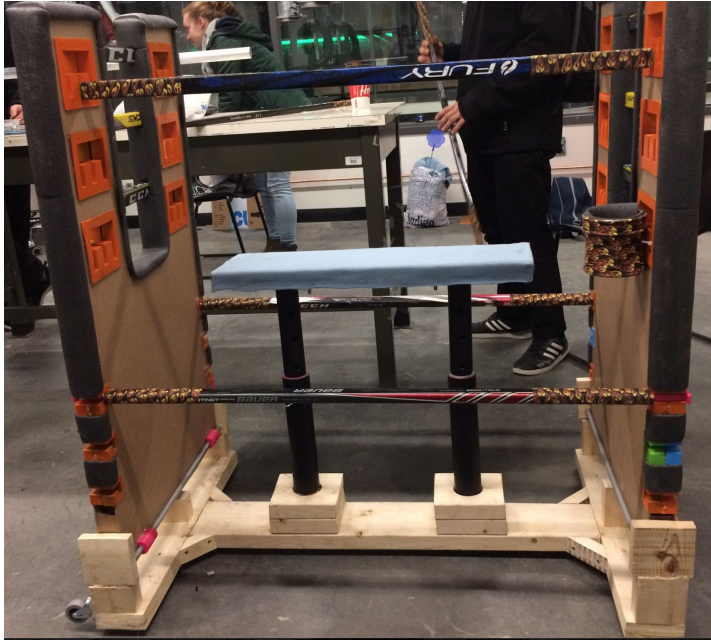


# Client Feedback

- David's Prototype
- Positive and Negative Feedback
- Materials to use
- Cool Factor
- Versatility



# Our Design












- Our design includes features such as:
  - 360 degree protection
  - Adjustable ankle supports
  - Adjustable hand supports
  - Foldable panels
  - Ice wheels
  - Adjustable seat
  - Bench Conversion (concern about comfort)
  - Lightweight





# Business Plan

<p><i>Key Partners</i></p>  <p>Non profit organisations and clubs for people with disabilities</p>	<p><i>Key Activities</i></p>  <p><b>WHAT WHO</b></p>	<p><i>Value Proposition</i></p>  <p>We will be giving accessibility to people with disabilities and providing risk of injury reduction to the user and the attendant.</p>	<p><i>Customer Relationships</i></p>  <p>Tutorials Social media community Donations</p>	<p><i>Customer Segments</i></p>  <p>People Organizations (Hospitals, Hockey Teams)</p>
<p><i>Key Resources</i></p>  <p>Material suppliers Online Platform</p>	<p>We will provide users a means to be integrated into equal participation with their peers.</p>	<p><i>Channels</i></p>  <p>Local retail stores Online store</p>		
<p><i>Cost Structure</i></p> 		<p><i>Revenue Streams</i></p> 		

# Knowledge Gained and Next Steps

- Knowledge from David and Jay
- Use of multiple tools
- Importance of critical decision making to keep on track with Gantt
- Time management
- Team Leader

## Next Steps:

- Even more lightweight
- Method for easy lifting



# Questions?

