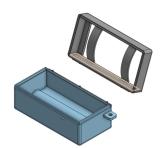
Documentation for week ending: November 5

## Thursday, October 29:

- Brainstorm additions to waterproof box:
  - Clear top
  - Plexi-glass top
  - Speaker
  - Removable pieces to be dried
  - Better latches
  - Key ring to hang from backpack/belt loop
  - Handles
  - Customizable portion of box
- Consider final materials for final product (not actually being made)
  - Aluminum
  - Plexi-glass
  - Metal latches

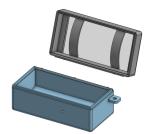
## Monday, November 2:

- CAD addition to waterproof box
  - Key ring tab
  - Plexi-glass top
- Made additional CAD file that had a blank spot on top of the box where I will fix the plexi-glass section to



November 2, 9:28

- Made a separate CAD file with all pieces separated to easily be able to print them all and put them together myself



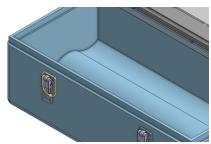
November 12, 9:44

- Created dimensioned drawing of important separate parts to aid me in creating my prototype
- Ensured that my tongue and groove pieces would fit into each other if 3D printed in real life

## Thursday, November 5:

- Began looking over final presentation rubric
- Looked a little into social value
- Created final latches

- Downloaded latches from website, had to CAD a few aspects of it that I could not shrink to scale
- https://grabcad.com/library/big-latch-1
- Added latches to assemble so that they could interact with each other



November 5, 9:54

- Can't get assembly to move how I want it, only animate itself in the panel on the left
- Affixed the latches to the sides of the box and copied the latch so that there are two, and it is more watertight

## Monday, November 9:

- Researched market potential
  - JOTO Waterproof Phone Pouch
    - Uses PVC material with a clear plastic on front
    - Includes polyester lanyard
    - Has a snap and lock access to keep water, sand, and dirt out
    - Fits phones up to 6.8"
    - 2 x .25 x .25
    - 1.76 ounces
  - Atwood Waterproof Boaters Dry Box
    - Durable plastic construction
    - O-ring inside lid
    - Flip-up lid Lift-out tray
    - Plastic on plastic contact for sealing
    - 15 x 8 x 10 in.
    - 2 pounds
  - Pactrade Marine Locking Boat Glovebox
    - Made of ABS, easily mountable
    - Glove box comes with non magnetic lock and latch
    - Plastic on plastic contact for sealing
    - 14 x 8 x 5.9 inches
    - 1.95 Pounds
- Worked on Value Proposition
  - For boat owners/kayakers
  - Mine would have tighter seal, inside padding, phone holster, buoyancy

#### Thursday, November 12:

- Worked on Social Value Slide
  - Aluminum casing:
    - Little danger to environment
    - Does not acidify in soil with pH of 5 or less
  - Foam Inserts:
    - Non-toxic treatment and manufacturing
    - Little negative effect on environment







- Elastic Straps:
  - Organic Cotton
  - Natural Rubber
  - Little negative effect on environment
- Researched Market Potential
  - 1/10 US households owns a boat
  - In 2009, 75 million OR 32% of adults went boating
  - This already increases my target market from just boaters
- Transformed All of my drawings to electronic renderings as shown below:



November 12, 9:36

November 12, 9:36 November 12, 9:36 November 12, 9:37 November 12, 9:37

## Monday, November 30:

 Deconstructed my Box and removed pieces that I will make out of materials

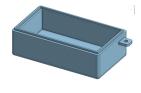


- Downloaded separate parts as STL files and sent them to teacher printing
  - Began printing
- Made slides about iterations, included photos



October 16, 10:12 am

October 22, 9:56 am November 16, 11:12 am



November 30, 10:02 am

## Monday, December 7:

- Went to post office to check for box
- Edited slideshow
- Checked hardware store for piano hinges





# Friday, January 8:

- Received 3D printed box and lid
- Assembled Box with hinge and latch
- Cut plexiglass top piece
- Added elastic phone storage
- Inserted removable foam piece



