



PROJECT LEAD THE WAY

# FOOT ORTHOSIS

By: Krithi Shri, Manya Srinivasan, Aryan Sengupta, Ananya Borkar, Vishwak  
Reddy Etikela

# Jobs

Recorder - Krithi Shri

Model Tester- Ananya Borkar

Presenter - Krithi Shri

Team Manager- Manya Srinivasan

UNKNOWN FACTOR - Aryan Sengupta

Builder - Vish and Aryan

# Struggles

- We attached the velcro to the bubble wrap, which was a poor choice.
- The budget was a struggle. We were broke.
- At first we had a little trouble with collaboration.
- We have had some disagreements on which design to use.
- There were a few communicative issues.
- Ankle support was the biggest issue.

# How did you develop your ideas?

1. We researched
2. Grouped our ideas
3. Improved design using other ideas

Our ideas were very basic so we improved along the way

# What changes did you make to improve your design

1. Used annotations to get materials and started building
2. Bubble was not sticking to cardboard->used velcro to make it stick
3. Bubble wrap not sturdy->used tape to attach together
4. Elastic band attachment making leg attachment unstable-> used velcro to make stable
5. Tippy toe available->used alistic band
6. Does not work properly->made ankle support

# Why do you think your design will satisfy your patients' needs?

- Our design should satisfy all of the requirements to make a functional foot orthosis.
- Our foot orthosis attaches to the foot and lower leg, it lets the ankle move upward and lets the leg rest flat on the floor while standing because of the cardboard.
- When the orthosis is worn the patient will not be able to stand on their toes and we made sure to have foot and ankle support since we reinforced it with cardboard and an elastic band.
- An important part of this orthosis was to make sure it was comfortable and removable, which we did by using bubble wrap and velcro.



Thank  
You