

Gravity Harness Meeting Minutes Week 01/25/17-2/01/17

Meeting: January 25, 2016 7:00-9:00 pm in Capstone lab

Team Meeting Discussion:

- ❖ Team began assembling EZ-up harness from purchased parts
- ❖ Group attempted attaching guide-rails to the EZ-up frame and modeled two design ideas
- ❖ Design 1:
 - The group unfastened links of the EZ-up structure to form two triangle shapes which could support the guide-rail. This can be seen in the image below.



Figure 1: Triangle Guide-rail Support

This design would require vertical supports to be installed and drilled into the frame. Although this design may potentially work, after the supports are fixed to the frame, the design may not be able to still be collapsible.

- ❖ Design 2:
 - This design attaches the guide-rails to the frame using a different method which allows the part to be loosened and swiveled when not in use. This can be seen in the figure below:



Figure 2: Position 1 of Guide-rail

This design was constructed by attempting to install the guide-rail along the original EZ-up frame shape with two pieces connecting at the middle position as seen above. This design will use a connecting member to keep the frames attached together at the middle point using knobs or metals strips. When the design then needs to be folded, the connection holding the middle components together can be loosened and allow the members to fold with the EZ-up frame. This can be seen in the figure below:



Figure 3: Position 2 of Guide-rail

Allowing the guide-rails to move as shown above will help the team's storage space requirement to be met. An effective way to keep the ends of the guide-rails are still being explored. The team currently plans to use shelves/clamps to keep the assembly fixed at the ends.

- ❖ Team assigned portions for presentation slides for Progress Presentation 01/30/2017

Weekly Tasks 01/25/17-02/01/2017

Team Member	Tasks Assigned
Khaled	<ul style="list-style-type: none"> • Create project description slides • Continue to update website with current information on our project
Hasan	<ul style="list-style-type: none"> • Create Budget slides and skills needed for manufacturing • Continue to monitor budget
Noah	<ul style="list-style-type: none"> • Show updates of final design for slides and discuss GANTT chart and schedule of project • Pick up extra parts needed to construct EZ-up shade • Communicate with client to determine meeting times for the rest of the semester
Eileen	<ul style="list-style-type: none"> • Create slides for manufacturing detailed plans for presentation. • Construct gravity harness instruction manual • Submit the power point slides to bblearn
A.J.	<ul style="list-style-type: none"> • Create updates slides from winter break • Submit meeting minutes by 1/29/2017

Next Steps:

- ❖ Meet at 9:00 am Monday 01/29/2017 to practice slides
- ❖ Bring tools this Sunday to work on assembly

- ❖ Continue to model ideas for assembling track system to EZ-up frame