

Project created on 08.09.2016 13:53.

Report for project Senior Design Electronic book

Task created on 31.03.2017 15:59.

Exoskeletal Splint

No due date

No description

Task tags: *No tags*

Completed by Nischal Khanal on 31.03.2017 16:02.

Step 1: Meeting with Dr. Klaesner 3/29/2017

During this meeting, we also discussed how we could develop a tension adjustment knob within our exoskeleton. Dr. Klaesner recommended that we look up STL files for a ratchet device which used "teeth-like" locking mechanisms. We could use such a design to increase tension on the wire by turning the device (and thus pulling the wire further into the device). Shirshak and Utsav will look into this device while I work on finalizing the CAD models for the exoskeleton.

Activity of task Exoskeletal Splint

31.03.2017 16:02 *Nischal Khanal* completed Step 1 **Meeting with Dr. Klaesner 3/29/2017** (1/1 completed).

31.03.2017 16:02 *Nischal Khanal* created Step 1 **Meeting with Dr. Klaesner 3/29/2017**.

31.03.2017 15:59 *Nischal Khanal* created task **Exoskeletal Splint**.

Task created on 23.03.2017 01:45.

Compression Glove

No due date

No description

Task tags: *No tags*

Completed by Nischal Khanal on 31.03.2017 15:57.

Step 4: Meeting with Dr. Klaesner

On 3/29/2017 we went as a group to Dr. Klaesner to ask him how we should measure the compressive forces applied by the elastic glove. He recommended

that we use a latex glove filled with fluid (in order to simulate a real hand) and measure the pressure inside before applying the elastic glove. Then, we should apply the elastic glove to just one finger and measure the final pressure within that finger. The difference in pressure would give us the pressure applied by our elastic glove. Shirshak said that he could ask Dr. Rudy to borrow a strain gauge from his lab.

Activity of task Compression Glove

31.03.2017 15:57 *Nischal Khanal* completed Step 4 **Meeting with Dr. Klaesner** (4/4 completed).
 31.03.2017 15:57 *Nischal Khanal* created Step 4 **Meeting with Dr. Klaesner**.
 23.03.2017 02:14 *Shirshak Aryal* completed Step 3 **Steps:** (3/3 completed).
 23.03.2017 02:14 *Shirshak Aryal* created Step 3 **Steps:**.
 23.03.2017 01:51 *Shirshak Aryal* completed Step 2 **Making a glove using spandex** (2/2 completed).
 23.03.2017 01:51 *Shirshak Aryal* created Step 2 **Making a glove using spandex**.
 23.03.2017 01:50 *Shirshak Aryal* completed Step 1 **Gloving process using spandex** (1/1 completed).
 23.03.2017 01:50 *Shirshak Aryal* edited Step 1 **Gloving process using spandex**.
 23.03.2017 01:50 *Shirshak Aryal* created Step 1 **Gloving process using spandex**.
 23.03.2017 01:45 *Shirshak Aryal* created task **Compression Glove**.

Task created on 17.02.2017 16:50.

Items finalized for Purchase

No due date

No description

Task tags: *No tags*

Completed by Nischal Khanal on 31.03.2017 16:03.

Step 9: Materials

All of the purchased materials have arrived. The Velcro ordered was only the tape to attach the straps so Velcro rolls were also ordered from Amazon. Those have also arrived. I will submit a reimbursement request to the BME department next week.

Activity of task Items finalized for Purchase

31.03.2017 16:03 *Nischal Khanal* completed Step 9 **Materials** (9/9 completed).
 31.03.2017 15:50 *Nischal Khanal* created Step 9 **Materials** .
 10.03.2017 16:44 *Utsav Malla* completed Step 8 **Google Hangout Session** (8/8 completed).
 10.03.2017 16:44 *Utsav Malla* created Step 8 **Google Hangout Session**.

03.03.2017 15:00 *Nischal Khanal* completed Step 7 **Spandex (still needs to be finalized)** (7/7 completed).

02.03.2017 22:16 *Shirshak Aryal* edited Step 6 **Guitar Strings**.

02.03.2017 22:16 *Shirshak Aryal* edited Step 5 **Velcro** .

02.03.2017 21:59 *Shirshak Aryal* edited Step 7 **Spandex (still needs to be finalized)**.

02.03.2017 21:58 *Shirshak Aryal* created Step 7 **Spandex (still needs to be decided)**.

02.03.2017 21:58 *Shirshak Aryal* completed Step 6 **Guitar Strings** (6/6 completed).

02.03.2017 21:58 *Shirshak Aryal* created Step 6 **Guitar Strings**.

02.03.2017 21:58 *Shirshak Aryal* completed Step 5 **Velcro** (5/5 completed).

02.03.2017 21:58 *Shirshak Aryal* created Step 5 **Velcro** .

02.03.2017 21:57 *Shirshak Aryal* edited Step 4 **ABS (Finalized): \$29.00-\$60**.

02.03.2017 21:57 *Shirshak Aryal* edited Step 3 **Hypafix (Finalized): \$23.56**.

02.03.2017 21:57 *Shirshak Aryal* completed Step 4 **ABS (Finalized)** (4/4 completed).

02.03.2017 21:57 *Shirshak Aryal* created Step 4 **ABS (Finalized)**.

02.03.2017 21:55 *Shirshak Aryal* completed Step 3 **Hypafix (Finalized)** (3/3 completed).

02.03.2017 21:55 *Shirshak Aryal* created Step 3 **Hypafix (Finalized)**.

24.02.2017 16:30 *Shirshak Aryal* completed Step 2 **Final List** (2/2 completed).

24.02.2017 16:30 *Shirshak Aryal* edited Step 2 **Final List**.

24.02.2017 16:30 *Shirshak Aryal* created Step 2 **Final List**.

24.02.2017 16:27 *Shirshak Aryal* completed Step 1 **Ordering Items** (1/1 completed).

24.02.2017 16:27 *Shirshak Aryal* created Step 1 **Ordering Items**.

17.02.2017 16:50 *Utsav Malla* created task **02/12/2017** .