Dental Hygiene 3

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ME476C

Team (I)

Majed Bourosli (Project Manager) Minekher Almari (Budget Liaison) Mubarak Alajmi (Website Developer) Mohammad Almutairi (Client Contact) Sultan Alotaibi (Documenter)

> Dr. Sarah Oman Client: Amy Smith July11 2017

Introduction

- Project Discerption.
- > Updates.
- Moving Forward.
- ► Hard-ware Review 2.
- > Analytical Analysis

Project Description

- A dental triturator mixes dental capsules content.
- Dental capsules are used for dental fillings.
- Device should be used in different countries.
- Project aims to make a manual dental triturator that is hand driven.
- The project is Under taken by Dental Hygiene department.

Client Contact



AMY SMITH, RDH, MS, MPH "Assistant Clinical Professor at Dental Hygiene department at NAU"

Updates

- 75% of the project has been done.
- The Gears and the shaft has been delivered
- The handle Crank will be provided by K&M machine shop.
- The base of the device will be made from wood.
- The cover case will be a transparent plastic.
- The Capsule holder still manufacturing in K&M machine shop.
- The gears has been assembled with shafts at the same machine shop.
- The bearings has been delivered to K&M Machine shop.

Moving Forward

- Continue Manufacturing the capsule holder and the other parts.
- Finishing up the base of the device and the upper cover.
- Stop watch will be attached to the device to know the time.
- The device will be tested after the assembly.

Analytical Analysis

- Medium to Lightweight
- Speed of output is 1800 rpm
- Time 10s to 15s

Schedule

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GANTT project	2		2017	1	1	1	1			1	1					
Name	Begin date	End date	Week 22 5/28/17	Week 23 6/4/17	Week 24 6/11/17	Week 25 6/18/17	Week 26 6/25/17	Week 27 7(2(17	'Week 28 7(9(17	Week 29 7/16/17	Week 30	'Week 31 7/38/17	'Week 32 B/6/17	Week 33 B/13/17	Week 34 B/2D/17	Wee B(2)
 Function Model 	3/24/17	3/24/17	5/21/17													
 Staff Meeting3 	4/10/17	4/17/17														
 Final Project Proposal Report 	4/20/17	4/20/17														
Refrencses	4/20/17	4/20/17														
 Final Presentation 	4/20/17	4/20/17														
 Final Peer evaluation 	5/1/17	5/1/17														
 Staff Meetings (Team) 	6/6/17	6/6/17														
 Team Meetings (Sultan) 	6/13/17	6/13/17														
 Hardware Review 1 (Team) 	6/20/17	6/23/17														
 Order gears (Majed) 	6/20/17	6/20/17	~													
 Machine shop mfc (Mohammad, Mubarak) 	6/21/17	6/21/17														
 Order bearing and case (Sultan) 	6/22/17	6/22/17														
 Designing holder (Minekher) 	6/23/17	6/23/17														
 Team Meetings (Sultan) 	6/27/17	6/29/17														
 Midpoint report 	7/7/17	7/7/17						7	C.							
 Implementation 	7/7/17	7/7/17						7								
 Analytical Analyese 	7/7/17	7/7/17														
 Midpoint presentations (Team) 	7/11/17	7/13/17														
 Hardware Review 2 (Team) 	7/11/17	7/13/17														
 Team Meetings (Sultan) 	7/18/17	7/20/17														
 Final Product Testing Proof (Team) 	7/25/17	7/27/17														
 Final Presentation and poster (Team) 	8/1/17	8/3/17														
 Final Report (Team) 	8/8/17	8/8/17														
 CAD package due (Team) 	8/8/17	8/8/17														

07.11.2017 Team I Mubarak

Who is responsible for what?

Mohammad	In contact with machine shop and the client
Majid	Mechanical device design guide and group manager
Mubarak	Order parts and website developer
Sultan	Solid-Work designer
Minekher	Budget

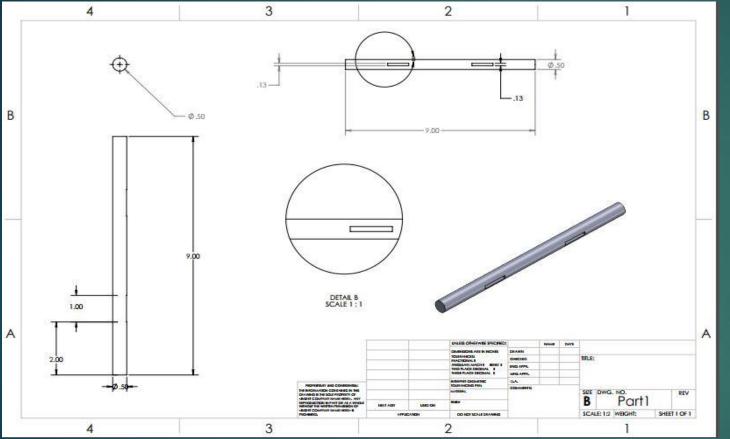
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Budget

Part	Quantity	Estimated Cost
40 Teeth Gear	2	2*40.7
20 Teeth Gear	2	2*31.5
Shafts	3	15.33
Hosing	1	120
Capsule holder	1	40
Handle	1	10
Bearing	4	60
Manufacturing	*****	480
Total		\$870.3

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Hardware Review 2

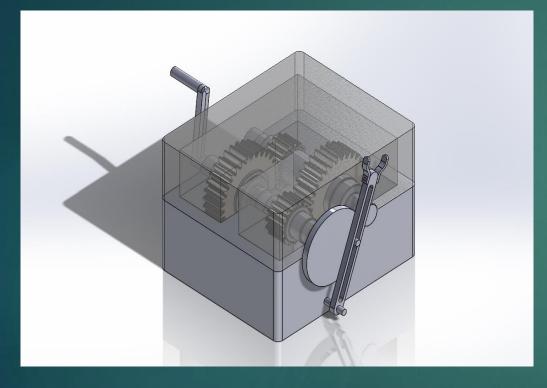


- Continue manufacturing the left parts
- Assemble all the the parts together to get working device.

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Isometric VIEW FOR THE DESIGN

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