

# Dental Hygiene 3

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

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# Introduction

- Project Discription.
- 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

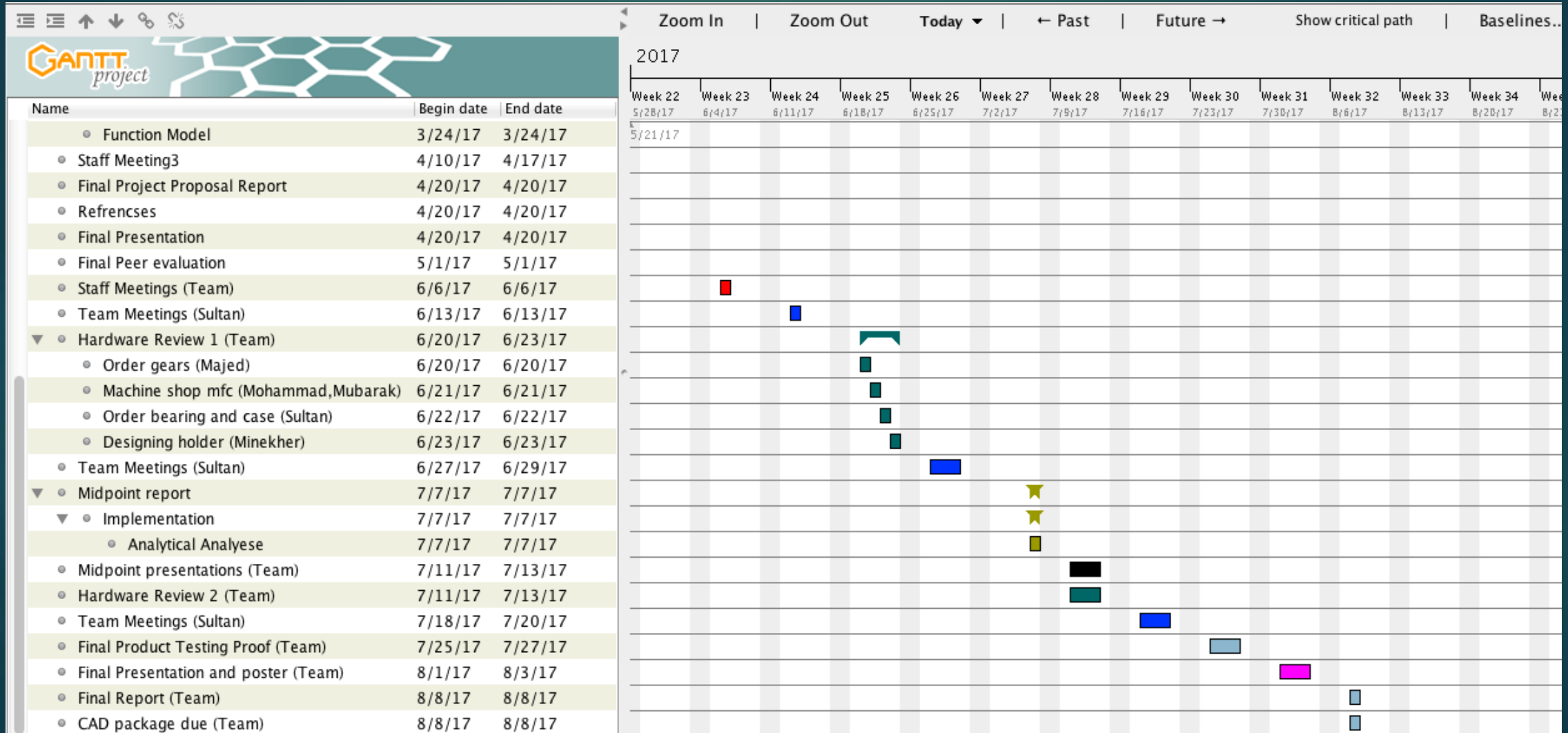
- ▶ Continue Manufacturing the capsule holder and the other parts. .
- ▶ Finishing up the base of the device and the upper cover.
- ▶ Stop watch will be attached to the device to know the time.
- ▶ The device will be tested after the assembly.

# Analytical Analysis

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

# Schedule





# Who is responsible for what ?

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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

# Budget

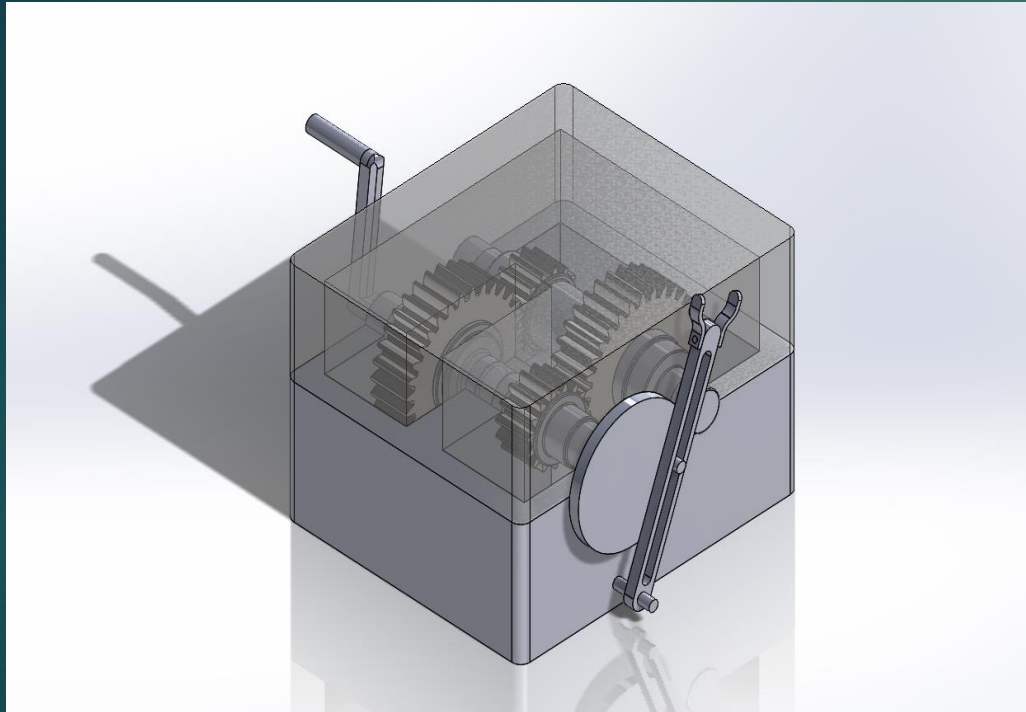
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Part	Quantity	Estimated Cost
40 Teeth Gear	2	2*40.7
20 Teeth Gear	2	2*31.5
Shafts	3	15.33
Hosing	1	120
Capsule holder	1	40
Handle	1	10
Bearing	4	60
Manufacturing	*****	480
Total		\$870.3



# Isometric VIEW FOR THE DESIGN

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**Presentation  
Finished.**

**Any questions?**

