

**Guiding Cane**

GNG 2101

**Deliverable G**

Team B32

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# INTRODUCTION

This deliverable revolves around creating an appropriate business model that suits the growth of this guiding cane prototype. Analyzing the core assumptions will be used to observe if this business model is feasible. Thereafter an economic analysis will be developed based on the business model chosen for the prototype. The economics report will consist of an income statement, NPV analysis, direct and indirect costs etc. The project plan will outline the tasks assigned to each team member, which were assigned based on their attributes. This will outline a theoretical business for this prototype.

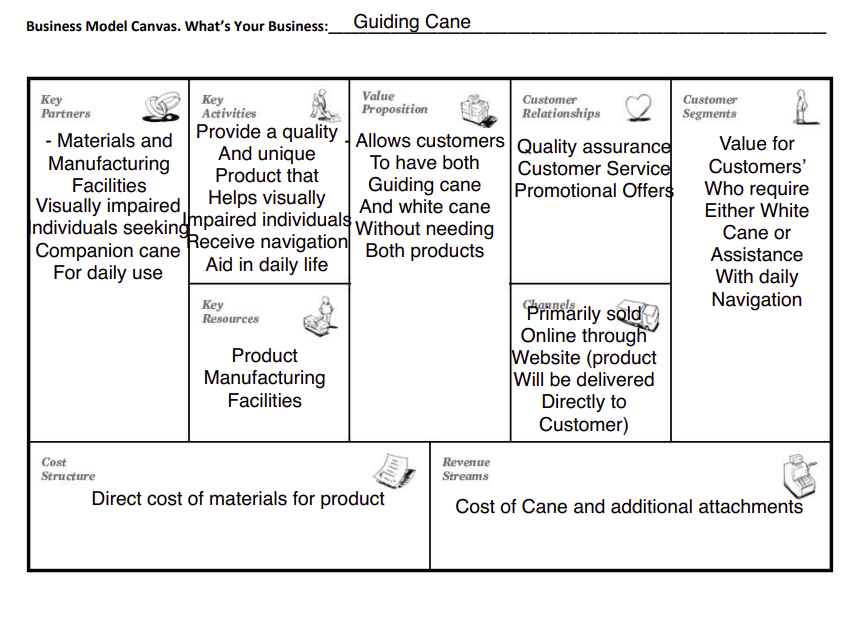
# BUSINESS MODEL

The business model will be created in order to outline a strategic plan that will create success for this guiding cane. This business model will be chosen based on what will suit this prototype for the purpose of commercialization. The reason behind this choice will be outlined in a business model canvas. Developing core assumptions that will determine the feasibility of this business model for the purpose of this prototype for amplified sales which will reach out to the appropriate customers.

## 2.1 Business Model Type

The type of business model chosen for the guiding cane is the razor-blade model as it is the business model that best suits this product. This is due to the fact that the main idea of this business model is to sell a product that is designed to have some sort of consumable component which requires the user to purchase additional products. While the cane will still be sold with basic attachments that satisfy user needs, if the handle wears out or the user requires different handle types for different usage cases, then these will be available for purchase.

## 2.2 Business Model Canvas



## 2.3 Core Assumptions

The business model type used for this project is the razor blade business model. Revenue is expected to be generated from the continuous purchase of consumable components, like the handles, overtime. The target market for this product is not just targeted at people with disabilities but people who may be relatives, close friends or anyone who may be assisting blind people purchase this product. It has been understood that basic needs of the cane users must be met but ensuring the cane design is aesthetically pleasing and not drawing too much attention is another major factor in the design of this cane.

The razor blade model is a feasible business model because it is important to meet every customer’s requirement. What may be comfortable to a user may not feel exactly the same to another customer.

# ECONOMICS REPORT

Developing an economics report will outline the necessary steps for the business’s financial success. The direct and indirect costs that will be analyzed and based on the manufacturing and the sales of this prototype. A 3 year income statement will be created which will outline the revenue of this business. An NPV analysis will be created to determine the break even point and cash flow diagrams, present value, and profits over multiple years etc will be outlined. These theoretical assumptions of the economics of this business will be based on preliminary market research. The economics of this business is important to ensure that all the financials are successful.

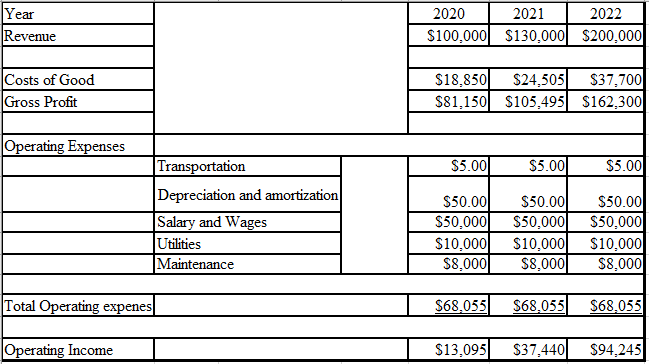
## 3.1 Costs

Various costs were made in order to develop the final project. The table below gives a rundown on the costs needed to create the final project as well as the type of cost it is and its price.

| Item | Type of Cost | Price ($) |
| --- | --- | --- |
| Material - Aluminum | Direct Variable Cost | 8.85 |
| Printing session | Direct Variable Cost | 10.00 |
| ComputerAidedDesign Application | Fixed Cost | 0 |
|  |  |  |

## 3.2 Income Statement

The income statement is created based on the theoretical values of how this business could run. It is created as a 3 year income statement including the revenue, operating expenses, operating income etc. These values will determine how well the company is doing financially. The income statement is as follows and thereafter the calculation used to find these values have been added thereafter.



## 3.3 Break-Even Point

## 3.4 Assumptions

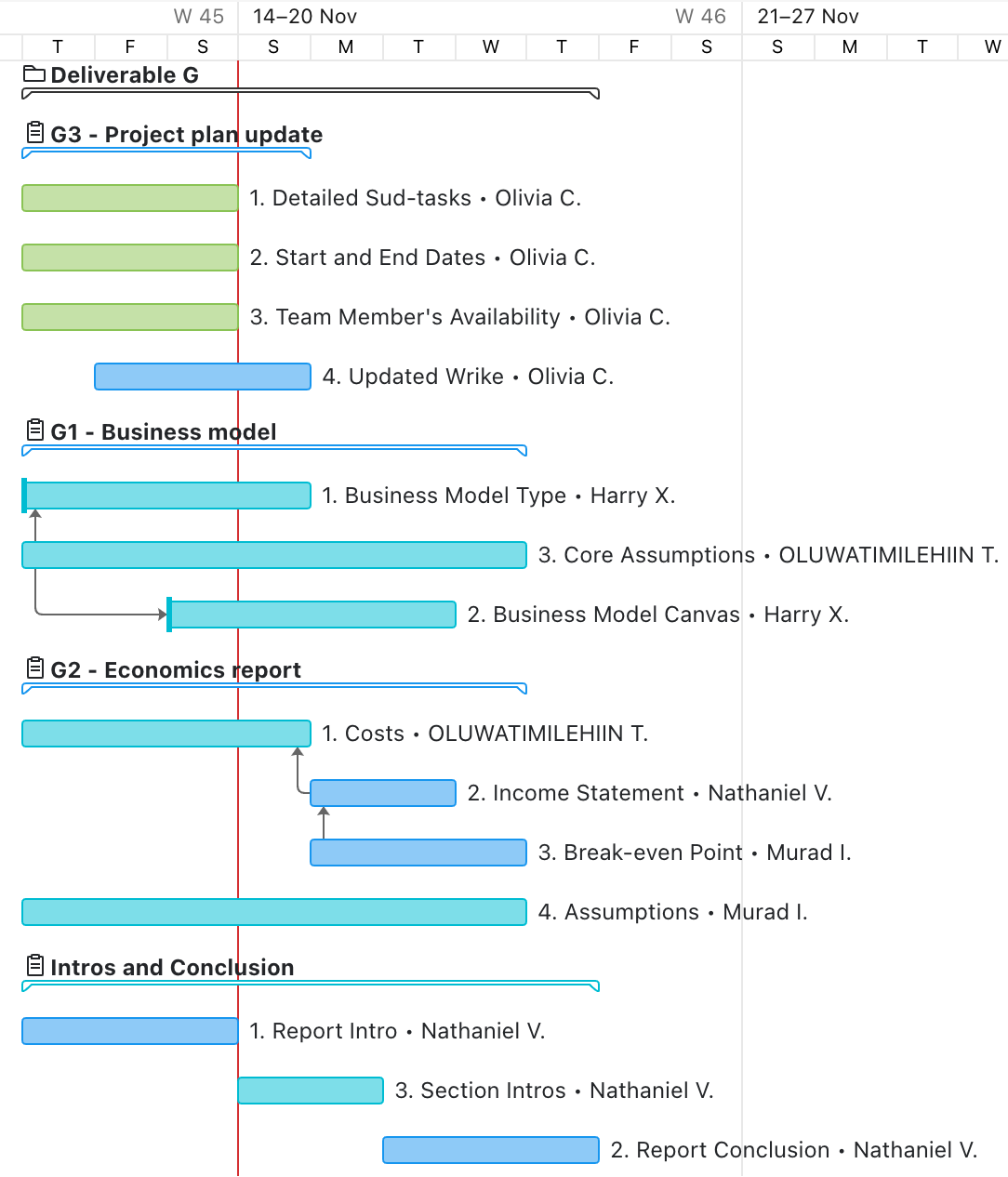
The guiding cane project has a number of important factors that have contributed to the cane’s final price. As stated earlier the business model type used for this project is the razor blade model. A number of handle options would be produced to satisfy the user's requirements. Different cane designs would be produced to match the user's aesthetic preference and comfort.

In order to make the best out of this product market research on guiding cane’s were carried out. The aim of this research was to determine the number on average of visually impaired people and understand how the demand and supply regarding guiding cane’s was distributed across Ontario. Having in mind that there are roughly 87,830 people who are legally blind and 816,250 people who have seeing conditions, this gives a comfortable marketplace for the guiding cane to be launched.

A penetration pricing method was agreed upon to lure people to buy this product. Most companies offer the same price for guiding cane’s but with a lower price entering the market would be simpler.

# PROJECT PLAN UPDATE

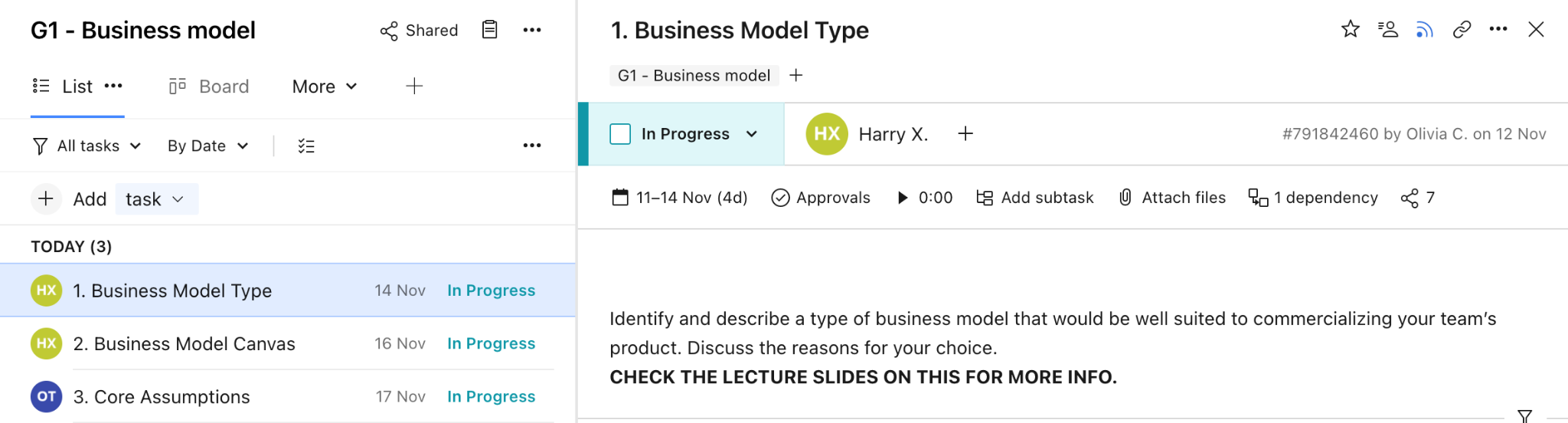
The following figure is the Gantt chart of the tasks assigned for this deliverable. Most of the tasks can be completed at any time before the due date, however, any dependencies that there may be have been given to the corresponding tasks.



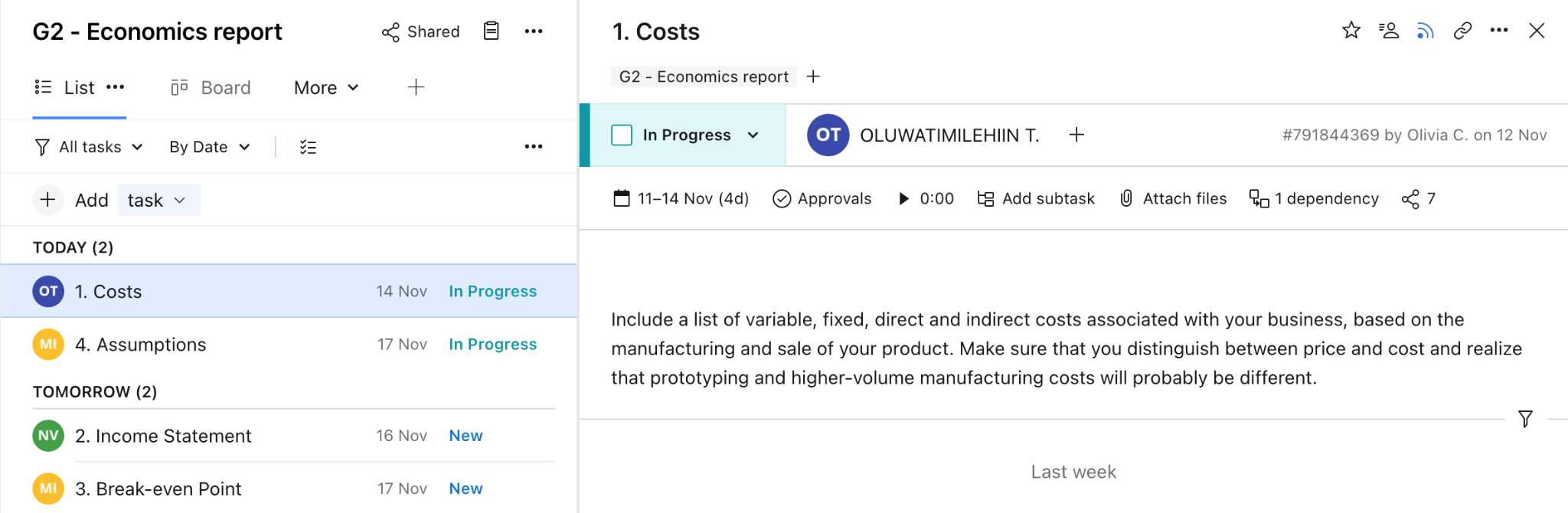
***Figure X - Deliverable G Gantt Chart***

## 4.1 Detailed Sub-Tasks

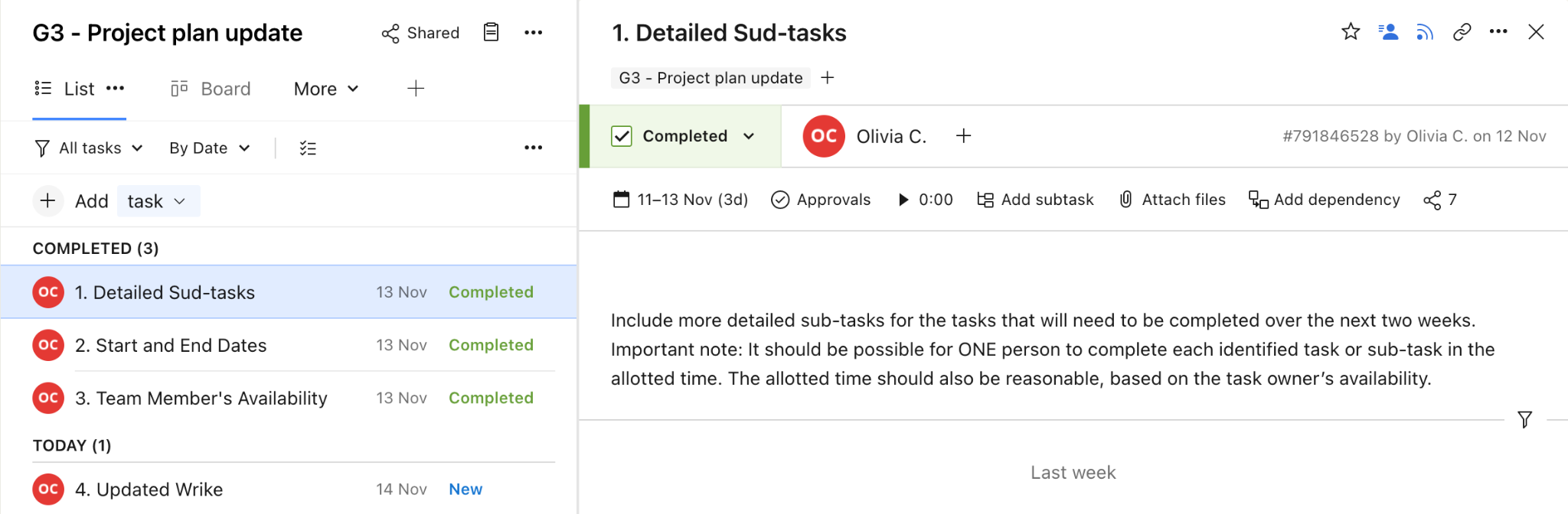
There are four main sections For this deliverable that include the business model, economics report, project plan update, and the intros and conclusion. Within these main sections are the sub-tasks. The sub-tasks are given a description. The descriptions given tell the assigned person exactly what is expected of them while completing the task. Below are some examples of sub-tasks from each of the main sections.



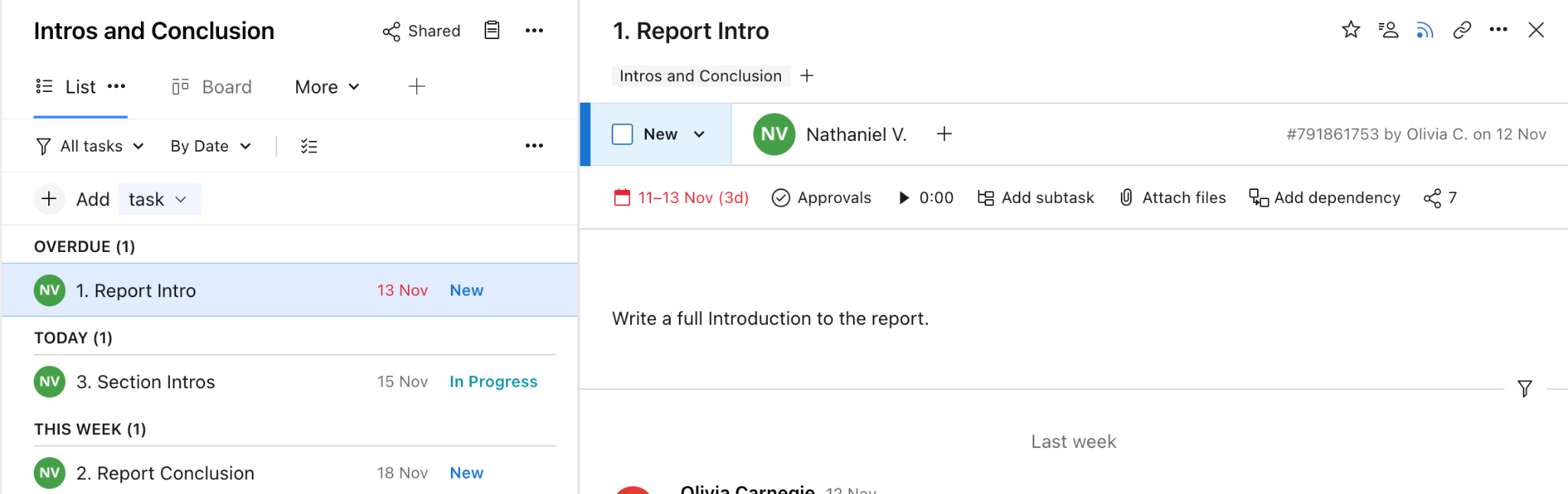
***Figure X - G1.1. Sub Task***



***Figure X - G2.1. Sub Task***



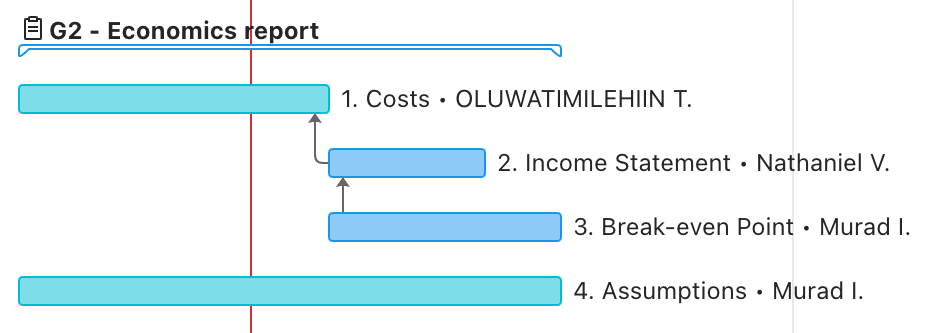
***Figure X - G3.1. Sub Task***



***Figure X - Intros and Conclusion.1. Sub Task***

## 4.2 Start and End Dates

The first thing to be looked at before assigning start and end dates to the tasks is if there are any dependencies. In the case of this deliverable there are a few dependencies in the business model and the economics report sections. Once the dependencies are established, the estimated start and end dates can then be put in place. An example of this is shown in the following figure.



***Figure X - Dependencies Example***

## 4.3 Team Member’s Availability

We decided to leave the task selection up to the individual team members. How this worked was that each of the team members took a look at the descriptions and the start and end dates of each task to then compare it with their own personal schedules. This method ended up working out really well for everyone. Everybody was able to get at least one of their top choices and were satisfied with the second assignment that was agreed upon. This method allowed for more flexibility within the group and a better fit of the tasks in individual schedules.

# CONCLUSION

The razor blade business model was proven to be the appropriate model that suits this guiding cane prototype. The core assumptions were analyzed and has proven that this business is profitable. The economics report analyzed the appropriate costs of this prototype and was used in the income statement. The income statement had illustrated the net income as well as the expenses that were used. It had been observed that the business will make a profit after expenses. The project plan was updated accordingly for the next deliverable to ensure that the team is organized and stays on task.