GNG 2101 Deliverable B

Needs, Problem Statement, Metrics, Benchmarking, and Target Specifications

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Abstract

This report details the problem definition process that was developed to provide a solution for a "Productivity Planner", proposed by the client. During the initial client meeting, the client proposed a productivity planner that could help simplify task management throughout her daily life. From this meeting, a list of client statements were gathered and identified as prioritized needs for the project. Through these prioritized needs, a problem statement was proposed and used in conjunction with benchmarking to create a list of target specifications for the productivity planner.

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1.   Introduction

This report outlines the problem definition process used to design a "Productivity Planner", as proposed by the client. During the client interview, the proposed productivity planner would help simplify the management of tasks throughout their everyday life. This meeting was important for our team to understand our client's problem and develop empathy for them, which would in turn help us create a product that would satisfy her needs. Following the meeting, our team applied our knowledge on the "Productivity Planner" to create a list of client statements that were organised into project needs. Subsequently, a problem statement was developed based on the clients needs, which were then used in conjunction with benchmarking to create a list of target specifications for the productivity planner. Our team has also taken the time to reflect on this entire process and the knowledge we have gained from the initial client meeting and how this will impact the rest of our product development process going forward.

2.

3.   Client Statements

Below is a list of client statements our team has obtained from the client interview:

1. The best planner would be something that's simple to use

2. The best planner would be pretty

3. I think it would be good if the app had multiple layouts: one for monthly or weekly deadlines, one for daily tasks color coded for tasks

4. I write stuff on my hand to remember things

5. I don't like using other productivity planners because I have to open them

6. I like using Apple devices regularly

7. I plan out my day in the morning and check deadlines on my calendar

8. I would love it if the application worked offline and was always available

9. I use an iPhone 11, 256 GB

10. I check my tasks throughout the day

5. Customer Needs

Table 1. Client statements and prioritized interpreted needs.

#	Client Statement	Interpreted Need	Priority (1-5)
1	The best planner would be something that's simple to use	Planner is simple to use	4
2	The best planner would be pretty	Planner is aesthetically pleasing	4
3	I think it would be good if the app had multiple layouts: one for monthly or weekly deadlines, one for daily tasks color coded for tasks	Planner UI has multiple layouts with color coded tasks	3
4	I write stuff on my hand to remember things	Planner can remind user of tasks	5
5	I don't like using other productivity planners because I have to open them	Planner can display tasks without opening the program	4
6	I like using Apple devices regularly	Planner application can run on iOS	5
7	I plan out my day in the morning and check deadlines on my calendar	Planner application displays a checklist of tasks of the user, and indicates which tasks are fulfilled or unfulfilled	5
8	I would love it if the application worked offline and was always available	Planner application does not require internet connectivity to function	5
9	I use an iPhone 11, 256 GB	Application has storage and memory limits	3
10	I check my tasks throughout the day	Application does not take long to open	2

The interpreted needs have been ranked in order of priority ranging from 1 to 5 (1 being least important and 5 being the most important).

7.   Problem Statement

The problem statement is that our client is having a hard time scheduling her tasks. As a medical student passionate about fitness as well as academic achievement, time management is difficult for her. The solution can be in the form of a digital, offline application that can be accessed from anywhere that allows her to see her daily commitments in an organized manner.

8.   Metrics

In Table 2, a list of metrics for the product was developed for each associated need, including functional and non-functional requirements and constraints.

Table 2. List of metrics with associated interpreted needs.

#	Interpreted Need	Metric	Units	Priority (1-5)
Functional requirements				
1	Planner application can run on iOS	iOS platform	N/A	5
2	Planner can display tasks without opening the program	Push notifications	N/A	4
3	Planner UI has multiple layouts with color coded tasks	Color coded layouts	N/A	5
4	Planner can remind user of tasks	App reminders	N/A	5
5	Planner application displays a checklist of tasks of the user, and indicates which tasks are fulfilled or unfulfilled	Checklists	N/A	5
6	Planner application does not require internet connectivity to function	Offline functionality	N/A	5
Non-functional requirements				
7	Planner is simple to use	Simple user	N/A	4

		interface		
8	Planner is aesthetically pleasing	Aesthetics	N/A	4
9	Application does not take long to open	Time to open app	sec	2
Constraints				
10	Application has storage and memory limits	Storage size	MB	3

9. Benchmarking

Table 3. List of similar products, with their features and specifications.

Product Name	Features/Specs	Comments
Getplan.co	-Offered on desktop however it is compatible with a mobile app. -Mobile app is only available on IOS. -Calendar/Schedule can be viewed from either a daily, weekly or monthly setting. -Notes can be added in a separate section. -Multiple ways to add or remove tasks.	-The client uses an iPad regularly and wants a planner that can be used on a mobile device. -The client wants to be able to submit assignments early, so having a monthly setting would be beneficial. -The client stated she used a journal, so the option to add notes is preferred. -At first glance, the application is a bit overwhelming (too many options)

	-Free to use, although a premium option is available.	-Although the dates can be adjusted, its functionality is less than optimal.
Productivity Planner by Intelligent Change	-A productivity planner book . -Cover is made with 100 percent natural cotton cover fabric. -A5 format. -100 percent biodegradable, recyclable -5.8 inches x 8.3 inches/ 148 mm x 210 mm. -1.06 lbs/ 483 g. -33.00$ CAD. -Each page has an inspiring quote. -The book is built for 6 months of planning.	-Good if the client wants to write something down with pen and paper, however our client prefers to only use iPad or phone for planner. -4.8 stars based off of 483 reviews. -Each page is highly in depth with spaces reserved for notes, additional tasks and personal scoring. -Easy to use.
LUX Productivity Pro Planner	-A productivity planner book. -Cover made out of faux leather. -A section is reserved for the user to write down reflections. -Available in a variety of colors (blue, black, purple, brown, navy blue and cappuccino).	-Rated 4.5 of 5 based on 1259 reviews. - Price is expensive.

-A5 format. -The book is built for 6 months of planning. -46.99$ CAD. -Comes with a pocket to store items.	-The pocket is very convenient, allowing the user to store cards and pencils. -Book is very progress orientated. -Easy to use.

10. Target Specifications

For each metric, the ideal and marginal values (limits) are listed in Table 4. These target specifications may change in the future as the project progresses with more necessary information and client feedback.

Table 4. List of target specifications with additional information.

#	Metric	Units	Relation	Ideal Value	Marginal Value	Justification	Verification Method
Functional requirements							
1	iOS platform	N/A	=	Yes	Yes	User has an iPhone and iPad	Test
2	Push notifications	N/A	=	Yes	Yes	User can receive communication from the app	Test

						without opening the app	
3	Color coded layouts	N/A	=	Yes	Yes	Requested by the client	Test
4	App reminders	N/A	=	Yes	Yes	User can receive communication from the app without opening the app	Test
5	Checklists	N/A	=	Yes	Yes	Allows for organization and interaction with tasks and deadlines	Test
6	Offline functionality	N/A	=	Yes	Yes	App can be used anytime, anywhere	Test
7	Layouts	N/A	=	Yes	Yes	Planner can be viewed in monthly, weekly, and daily layouts.	Test
Non-functional requirements							
7	Simple user	N/A	=	Yes	Yes	Allows the user to	Test

						navigate the program easily	
8	Aesthetics	N/A	=	Yes	Yes	Aesthetics lead to greater client satisfaction	Test
9	Time to open app	sec	<	3	8	App can be quickly accessed	Test
Constraints							
10	Storage size	MB	<	100	300	Ideal storage size from benchmarking other productivity planners	Test

11.

12.

13.   Reflection

14.   The client interview has made a significant impact on our results and process. Prior to the client interview, our team acquired a general understanding of the project based on the information given on Makerpro. There was still a lot we did not know about our client and the problem, so we utilized the interview with the client to gain a deeper understanding of the problem and develop empathy towards them. Subsequently, this would help us better understand the project requirements and produce a better planner for our client. The interview provided our team an opportunity to learn more about the client's needs and preferences for the planner. The open-ended and neutral questions we asked during the interview allowed us to develop a deeper understanding of the task given to us, since we did not guide them to any particular answer, but let them give us their most honest and creative answers. Our team was able to truly understand the problem our client faced and their needs as a customer. The interview made our team reflect on our understanding of the project both in preparation for and after our meeting. This has impacted our results because we were able to obtain the clarification we sought going into the interview. As a result, this will benefit our process because our team will be able to reference the new information we collected about the client and project to create a planner that is maximally aligned with our client's needs.

15.

References

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