

Graduation Proposal

Student's Name & No: Eslam Ghazy - 19151500

Student's contact details: eslam@atenvally.com

Graduation Company Name & Location: Aten Valley - The Hague, Netherlands

Contact/Mentor name:

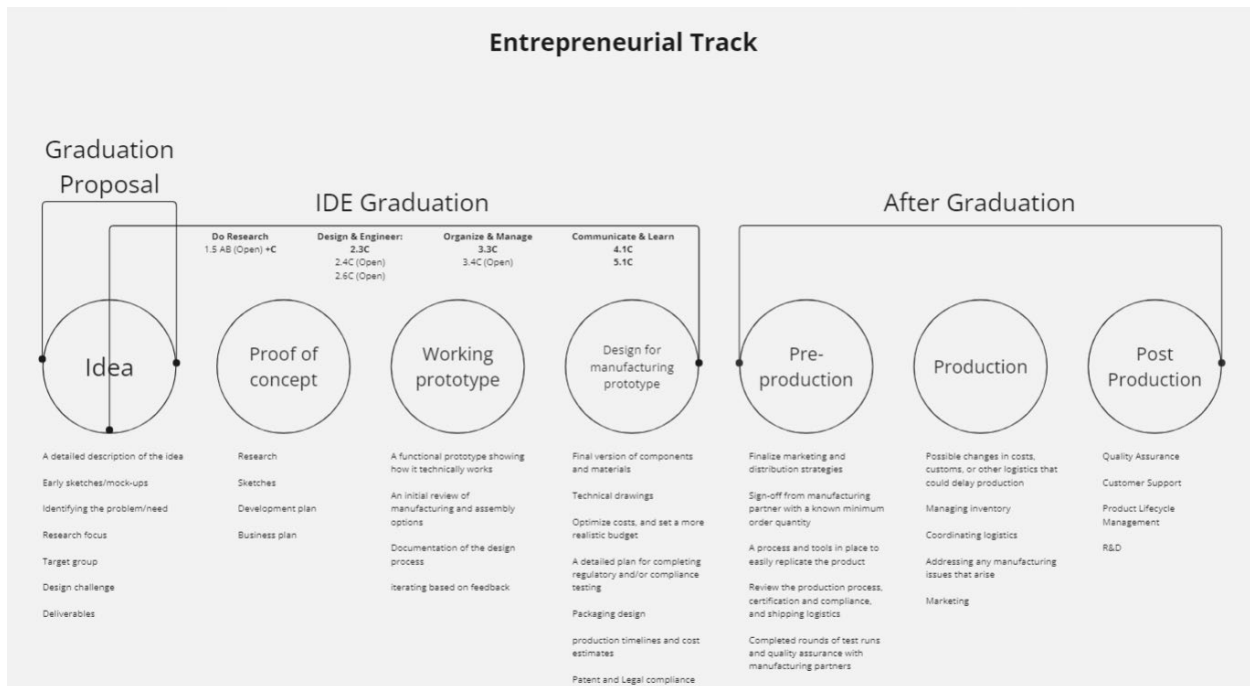
Contact details:

Company's web page: www.eslamghazy.com/contact

Remarks:

I am eager to pursue the Entrepreneurial Track as it aligns with my career goals and presents a great opportunity to develop the product idea I created in BOI. The track aligns well with my open and fixed sub-competencies in IDE.

The image below illustrates how I plan to go about the Entrepreneurial Track during and after graduation.



Introduction:

The rapid growth of remote work and reliance on laptops for daily tasks has resulted in an increasing demand for ergonomic solutions to alleviate strain and improve productivity. However, existing laptop stands often lack customization options, sustainable design principles, and the versatility of a quick-mount feature, leaving room for innovation in the market. The product “Gripstone” seeks to address these gaps by developing a unique, customizable, and eco-friendly laptop stand that enhances user experience by introducing the quick-mount feature.

The quick-mount feature of the Gripstone laptop stand allows users to easily attach and detach the stand from various surfaces in seconds, providing unmatched adaptability and convenience. This feature opens up numerous possibilities for usage, transforming the way users interact with their laptops and other devices in various environments, such as home offices, coffee shops, libraries, and more. By combining customization, sustainability, and the quick-mount feature. The Gripstone aims to revolutionize the ergonomic laptop stand market, catering to the evolving needs of remote workers and students alike.

Value Proposition:

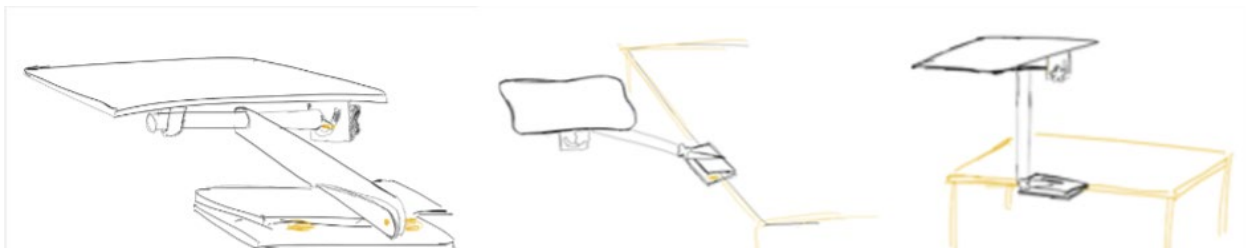
A modular, eco-friendly laptop stand that combines customization, sustainability, and user-centered design to enhance the remote work and study experience. My value proposition is to offer a versatile and ergonomic solution that caters to individual needs while reducing environmental impact. The product is called The Gripstone.

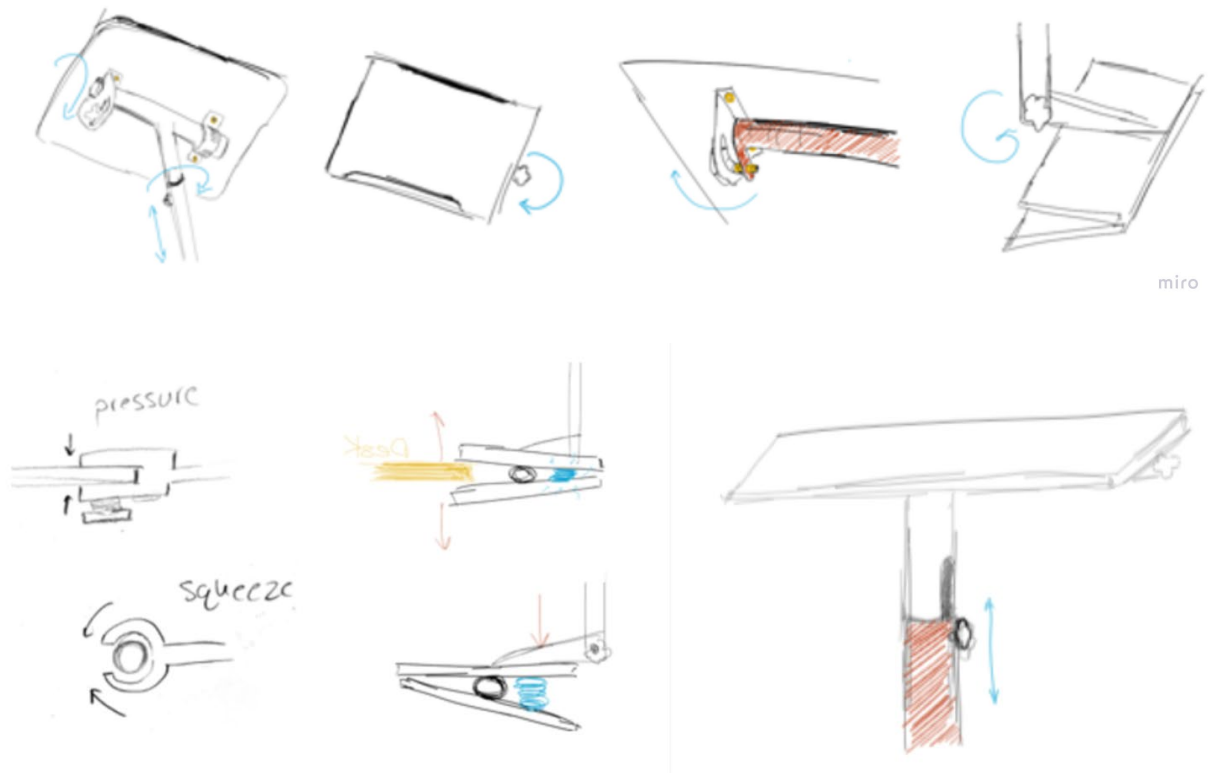
With a focus on user-centered design, The Gripstone aims to accommodate various activities, work environments and user preferences, enabling users to create an ergonomic workspace that promotes comfort and productivity.

The Gripstone aims to meet the evolving needs of remote workers and students alike, providing a reliable and adaptable solution for everyday use. Its quick-mount feature ensures seamless attachment and detachment from different surfaces, enhancing convenience and portability.

I aim to minimize the environmental footprint of The Gripstone by utilizing sustainable materials and practices while building the product.

Early Sketches:





Problem statement:

The growing prevalence of remote work and distance learning has led to a significant increase in laptop usage for extended periods. Prolonged laptop use without proper ergonomic support can result in physical strain, discomfort, and reduced productivity for users. While there are several laptop stands available in the market, many of them lack essential features that cater to individual user preferences, environmental concerns, and adaptability to various workspaces.

Existing laptop stands often fail to provide sufficient customization options, hindering users from achieving optimal ergonomic configurations that suit their unique needs. Additionally, many of these products do not prioritize sustainability in their design and manufacturing processes, resulting in a negative environmental impact. Furthermore, conventional laptop stands typically lack the ability to be quickly mounted and detached from different surfaces, limiting their versatility and adaptability across various settings.

This project seeks to address these shortcomings by developing a customizable, eco-friendly, and adaptable laptop stand that caters to the unique needs and preferences of remote workers and students. The challenge is to identify and address the unmet ergonomic, adaptability, and sustainability requirements of this target audience, and to design a laptop stand that effectively incorporates a quick-mount feature to enhance user experience and convenience.

Research Focus:

This project will focus on understanding the needs and preferences of remote workers and students who frequently use laptops for extended periods. Primary research methods, such as interviews, surveys, photo studies, and focus groups, will be used to identify the unmet needs and requirements of the target users.

The research question is: "What are the unmet ergonomic, adaptability, and sustainability needs of remote workers and students using laptops, and how can a customizable, eco-friendly laptop stand with a quick-mount feature address those needs?"

Sub-questions will include: "What customization and attachment features are essential for the target users?" and "What sustainable materials and practices can be incorporated into the laptop stand design?"
The research domain will encompass ergonomics, sustainability, adaptability, and customization in product design.

Design Challenge:

The design challenge will be to create a customizable, ergonomic laptop stand that incorporates sustainable materials, practices, and a quick-mount feature while addressing the identified unmet needs of the target users. Creative processes planned for developing the solution include user-centered design methods, such as co-creation workshops and focus groups, to gather insights and ideas from potential users. Additionally, the project will explore innovative design techniques, such as parametric design, to enable customization and modularity in the final product.

Planning:

My plan consists of several milestones, including research, concept development, prototyping, user testing, and design for manufacturing. I plan to involve users in the design process by participating in co-creation meetups and workshops like [Sensemakers Amsterdam](#). Below is the initial planning for the tasks and activities over the course of 20 weeks:

Week	Plan
1-4	Literature review and primary research (interviews, surveys, photo studies, focus groups) to identify unmet needs and requirements of target users
5-8	Concept development, design iterations, and prototyping, incorporating user insights, sustainable materials, and the quick-mount feature
9	Midterm review and presentation
10-12	Refining the prototype based on midterm feedback, incorporating user feedback
13-14	User testing and validation of the refined prototype
15	Go/No-Go decision and adjustments if necessary
16-18	Finalizing the design, creating detailed technical drawings, and establishing a manufacturing plan
19-20	Preparing and handing in final documentation, presentation materials, and deliverables

Planned SCs for graduation: (Open SCs)

Do Research:

- **1.5 AB:** Report on research using a practical scientific standard

Design & Engineer:

- **2.4 C:** Desirable, Viable, Feasible
- **2.6 C:** Evaluation

Organize & Manage:

- **3.4 C:** Entrepreneurship

Target group:

Freelancers, remote workers, and students who frequently use laptops for extended periods, not necessarily at one place.

This group has been chosen due to their increased need for ergonomic solutions to prevent strain and discomfort during prolonged laptop use. During the research phase, the target group may be further refined based on the identified unmet needs and preferences.

Methods:

I'm planning to employ various methods throughout the project to ensure a user-centered design process. Some of the methods I plan to use:

Diverging & Converging: Ideate the product concept and components from scratch

User interviews: Conduct one-on-one interviews with potential users to gather insights into their ergonomic needs, preferences, and pain points.

Surveys: Distribute online surveys to collect quantitative data on user needs, preferences, and expectations regarding a customizable, eco-friendly laptop stand.

Photo studies: Analyze images of users' current laptop setups to identify common ergonomic issues and potential opportunities for improvement.

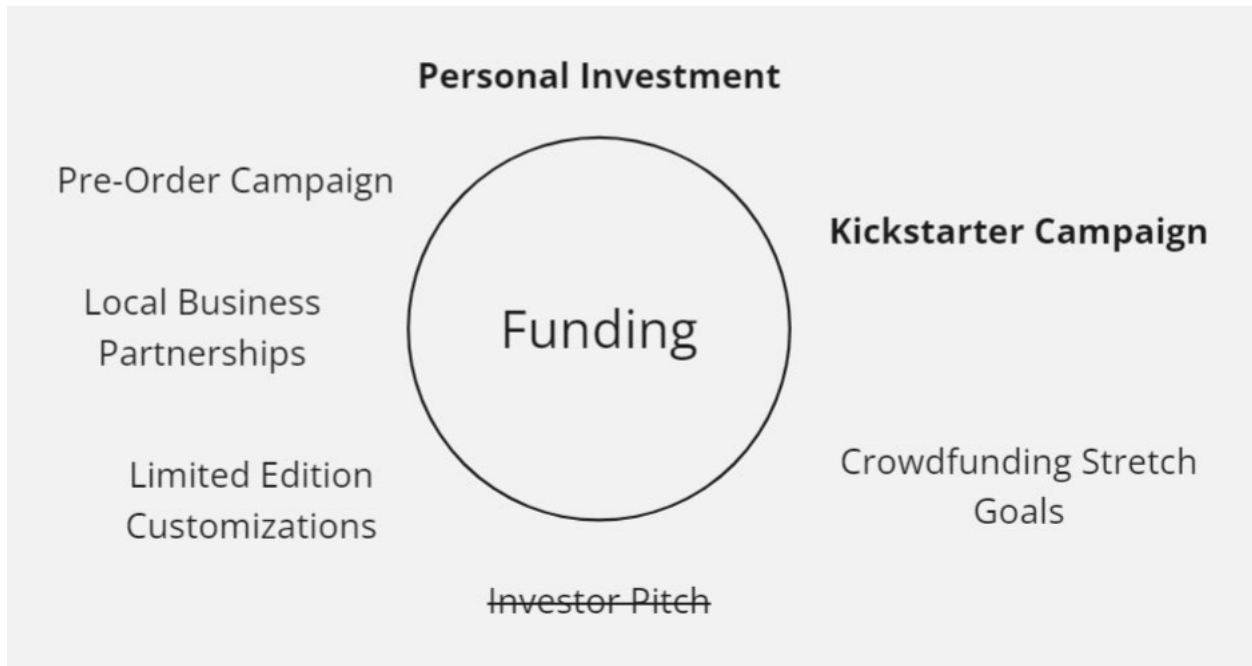
Co-creation workshops & Focus groups: Collaborate with potential users to generate design concepts and ideas that address their needs and preferences.

Prototyping and testing: Develop and test multiple iterations of the laptop stand, incorporating user feedback and sustainable materials, to refine the design and ensure its effectiveness.

Deliverables:

I aim to deliver a functioning prototype, technical drawings, production instructions, and detailed report(s) outlining the research findings, design process, and sustainability considerations.

Funding:



Imagine the possibilities:

The product is called Gripstone (For now)

1. Turn a **kitchen** countertop into a recipe hub by attaching Gripstone to the edge of the counter, keeping your laptop safe from spills and messes while you cook
2. Convert your **balcony** railing into a work surface with a view
3. Enhance your comfort during long layovers at the **airport** by attaching Gripstone to a waiting area seat's armrest, allowing you to maintain proper posture and reduce fatigue
4. Set up a temporary workspace at the **library** by clamping Gripstone to a table edge, providing an ergonomic boost and freeing up valuable table space for books and notes
5. Turn a **park bench** into a relaxing outdoor office by attaching Gripstone to the bench's backrest, giving you the chance to work in a serene and inspiring environment
6. Set up an ergonomic work-from-home station in seconds by clamping Gripstone to your **dining table**, eliminating the need for a dedicated home office
7. Convert your **bed's headboard** into a late-night study or work area, providing a comfortable angle for your laptop while keeping your workspace separate from your sleeping area
8. Transform your **treadmill** into a walking workstation by attaching Gripstone to the treadmill's control panel, making it easy to stay active and productive simultaneously
9. Enhance your photography or videography workflow by attaching Gripstone to a **tripod or light stand**, providing a secure and adjustable platform for your laptop while editing or shooting tethered
10. Convert a **hospital bed's** side rail into a convenient workspace for patients, allowing them to stay connected and entertained during their recovery
11. Attach Gripstone to the **steering wheel of a parked vehicle**, creating a mobile office for professionals on the go, such as sales representatives or field technicians
12. Combine Gripstone with a **portable projector stand** to create a versatile home theater system, perfect for movie nights or gaming sessions in any room of your home
13. Attach Gripstone to the side of a bunk bed, providing a comfortable and space-saving workstation for students in **dormitories**
14. Attach Gripstone to a **wheelchair's armrest** or tray table, offering a secure and adjustable workspace for people with mobility impairments

15. Transform a workout bench or **gym** equipment into an exercise guide by mounting Gripstone, giving you easy access to workout videos or tracking apps while you exercise
16. Transform a **poolside lounge chair** or **beach cabana** into a relaxing outdoor office by attaching Gripstone, allowing you to work, study, or unwind while enjoying the sun and water
17. Create a mobile **DJ station** by attaching Gripstone to a music equipment case, providing a stable platform for your laptop while mixing tracks at parties or events
18. Establish a **bicycle repair station** by attaching Gripstone to a bike work stand or repair clamp, offering a stable surface for referencing repair guides or instructional videos while working on your bike