Project Team Members

- 1. Summary /Conclusion Writer & Overall Editor: Maddy Lohr
- 2. Market Researcher: Mikey Mirmigos
- 3. **Product Designer**: Cole Joly
- 4. Devil's Advocate/Critic/"Jack of all Trades": Jack Lindsey-Noble

1. Executive Summary (Overview)

The S.H.R.E.A.K. (Smart Hovering Robotic Executive Assistance Kit) is a drone-based tool for high school and college students who struggle with procrastinating that provides motivation through intense auditory stimuli. When you begin to spend significant amounts of time avoiding making necessary progress on assignments, its speakers blare loudly to make it clear to both you, and everyone around you, that it's time to get working.

It is designed to solve the common problem of procrastination, which prevents countless students from being able to finish their assignments within the given time frame. It has become a common yet harmful habit for many to begin their work on something then "take a short break", which inevitably spirals into long-term avoidance that results in them either submitting lower quality work at the last minute or not getting it in before the deadline, both of which can lead to irreparable damage to their grades in the long run.

The S.H.R.E.A.K. drone helps solve this problem with its Google and Microsoft integration to monitor assignment progress, tracking system that allows it to follow you wherever you travel, and loud 100 decibel speaker.

2. Market Research and Need Justification

Studies show that almost everyone in America (95% of people) procrastinates on a semi frequent basis, meaning this product can find use nationwide. Furthermore, 20% of Americans suffer from chronic procrastination and desperately need solutions to keep them on track. This product will be an all purpose solution to not getting your work done by offering encouragement to the user in the form of negative reinforcement. Almost every competing solution to this problem is an app such as Session or Rescuetime that in some way will let you know when you

should be working. All these apps share the trait that they can be disabled at the user's will, or better yet ignored entirely if the user isn't on their phone (such as when they're pacing around the room instead of working like many of us are prone to do). The S.H.R.E.A.K. addresses this problem by following the user around while tracking their progress to ensure that when it's time for them to work, they'll have no choice but to drop what they're doing and be productive. The product will automatically charge itself at night and follow you around during the day without a convenient off switch, meaning there's no easy escape from our reminder as opposed to our competitor's. Our product's unique ability to encourage work without the option to ignore it is what sets it apart from the competition.

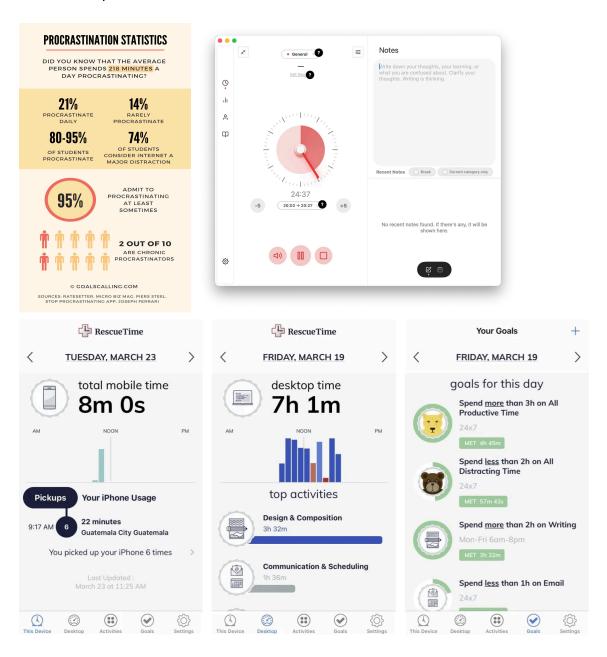
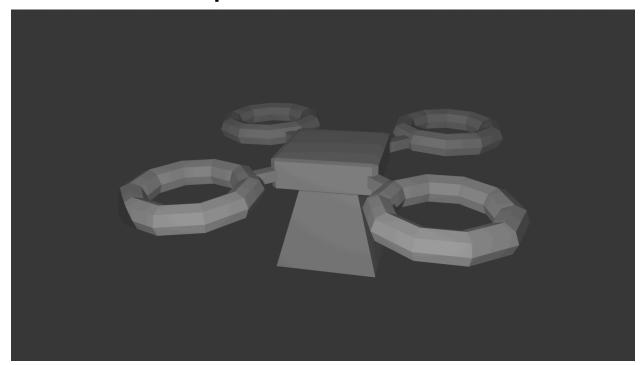


Figure 1: Statistics on procrastination from https://goalscalling.com/procrastination-statistics/

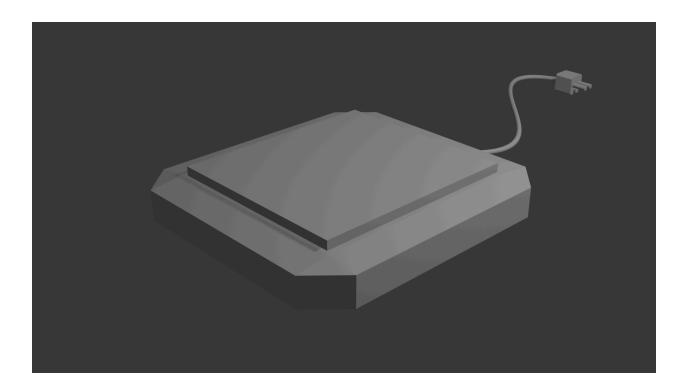
Figure 2: Session, an app that times you to remind you when you need to get to work

Figure 3: Rescuetime, an app that tracks screen time and sets goals for the day

3. Product Description







Key Features / UIX:

- The device boasts a portable size of 6" by 6", perfect for use anytime and anywhere. This is a relatively small size for drones, making it easier for the S.H.R.E.A.K. to navigate with you through any environment.
- Equipped with a large downward facing 100 decibel speaker, the S.H.R.E.A.K. is loud enough that the user can't ignore or sleep through their reminder to get working. Its volume will also draw the attention of those in the surrounding area, adding to the shame the user will experience if they decide to continue procrastinating.
- Through seamless connection to your assignment's workspace (such as Google Docs or Microsoft Word), the S.H.R.E.A.K. can tell when the last time you were working on your assignment was, and in response, trigger its loud alert when the due date is getting close but the user still has not made meaningful progress towards completing it. The way to turn off the alarm is to log on and start working.
- The S.H.R.E.A.K. is made with lightweight yet durable materials designed for continuous all day operation. It effortlessly hovers just above you, with its four propellers providing stable and quiet flight. In the unexpected case of a malfunction or crash, its light weight and propeller guards help ensure safety for everyone in the area.

- The drone also features a distance sensor to keep it steadily hovering 1.5 feet above the user's head. This is high enough that it won't risk getting caught in the user's hair, but low enough that it won't hit the ceiling either.
- Along with the drone itself, the kit comes with a wireless charging dock. This dock plugs into any standard outlet and acts as a home base for the device. When within range and low on power, the SHREAK will orient itself to charge on the dock completely on its own.

4. Possible Issues and Counterarguments

Frequently Asked Questions

"Isn't procrastination already solved by existing apps?"

While it is clear that there are already solutions for procrastination on the app store today, we believe that S.H.R.E.A.K. provides a service that currently cannot be found on the market. The key issue with these apps is that they do not provide **real** accountability. If the user prefers, they may uninstall the app, but what if the app is hovering above their head, where they can't as easily turn it off?

"Is public shaming too extreme?"

No. Social pressure is one of the strongest motivators we have as human beings! If we can use that energy to finally make people stop procrastinating and finish their magnum opus, why shouldn't we?

"What about privacy concerns?"

Our team is very transparent: the S.H.R.E.A.K. and all of its technology only accesses the information that the user consents to the product accessing. The shame doesn't come from your personal information being leaked, only from your own lack of productivity.

"Couldn't people just turn it off?"

Technically, yes. But that defeats the whole point, and they know it. Turning it off doesn't feel like relief, it feels like giving up in front of an audience. And unlike competitor apps, the fact that the drone is hovering in the air makes it difficult to turn off, ensuring that the user really has time to consider what they're attempting to do.

"What if it malfunctions in public spaces?"

The S.H.R.E.A.K. drone is both small and lightweight, meaning that in the rare event of a malfunction, it is unlikely to hurt anybody. It is also equipped with guards on its propellers to further reduce the risk of injury, and our company would have insurance to cover any major damage if it were to occur.

"Isn't this just a joke product?"

Not at all. While "the joke" of this product is intentional, the problem it is trying to solve is very real. Procrastination is costing people productivity, money, and mental health. The S.H.R.E.A.K. uses humor and spectacle as the delivery mechanism. Additionally, its seemingly absurd concept could be a strong motivator for people to want to try it and to catch people's attention in marketing.

Technical & Financial Considerations

• Hardware Costs

 Motors, stabilization, sensors, speakers, and a durable frame will likely add up to a sizable upfront investment. Early prototypes will likely cost more than the average productivity app, but the unique accountability factor justifies the upfront investment. Over time, this will even out.

Battery Limitations

 Current battery technology means sessions may be limited to a few hours at a time before recharging is necessary, but luckily its included wireless charging base makes charging the battery quick, easy, and automatic.

Safety Concerns

 Propeller guards, lightweight materials, and controlled hover distances are essential. We want users to feel pressured, not threatened by a mortal injury.

Scalability Concerns

Noise, interference, and crowded environments present real challenges.
 However, with modular hardware and cloud-based task tracking, the system can scale gradually.

Risk Mitigation Plan

Technical Risks:

Risk	Mitigation	Likelihood	Impact
Drone malfunctions or poses safety hazards	Incorporate propeller guards, lightweight materials, and automatic shutoff features. Implement geofencing and obstacle-detection sensors.	High	High
Battery limitations reduce usability	Utilize high-efficiency batteries with automatic overnight wireless charging	High	Medium

Financial Risks:

Risk	Mitigation	Likelihood	Impact
High production costs limit affordability	Start with small-batch production or crowdfunding. Partner with drone manufacturers in order to leverage existing hardware.	High	Medium
Weak consumer demand	Launch a humor focused ad campaign, aimed at a specific target audience identified during focused market research.	High	High

Reputational Risks:

Risk	Mitigation	Likelihood %	Impact
Public backlash over "shame-based" motivation	Emphasize satirical and humorous intent, offer user-controlled settings, and provide alternative motivational voice options.	High	Low
Privacy concerns from workspace integration	Limit data collection to activity status only, publish transparent privacy policies, and allow customizable permissions.	Medium	Medium
Misuse in inappropriate settings (libraries, classrooms)	Include location-based controls, quiet mode, volume limits, and clear disclaimers for responsible use.	Medium	Medium

5. Conclusion and Recommendations

In summary, the S.H.R.E.A.K. is an innovative and effective solution against the increasingly harmful epidemic of procrastination among students. Despite how detrimental it can be, the problem of avoiding important work has become the norm for many due to lack of motivation. This fact is exacerbated by the numerous flaws that are present within existing solutions, namely apps

designed to reduce screen time. While they can be helpful for some, they can easily be turned off and do little to target students who procrastinate by doing activities outside of using their phone. These flaws are where the S.H.R.E.A.K. excels. The drone's ability to follow the user around ensures that no matter what they're doing, it will be able to motivate them to start working and although some see it as controversial, the public shame it has the potential to create when its speakers start playing loud alarms is something that very few people are willing to ignore.

Implementation of the S.H.R.E.A.K. could mean moving one step closer towards a truly productive society. Even though procrastination can seem like a fairly insignificant problem when looked at through a narrow lens, its negative effects can be detrimental on a larger scale. For example, a student who procrastinates so frequently that they regularly miss strict assignment deadlines can do lasting damage to their GPA, which in turn could cause them to fail classes, lose scholarships, or have a harder time securing a career in the future.

We strongly recommend supporting the development of the S.H.R.E.A.K. because while a person who uses it may experience a minor negative social impact in the short run, it will effectively reduce the extent to which they procrastinate which sets them up for a more productive, successful, and financially stable life in the long run.

6. Appendix

Forestal, Jennifer. "Social Media, Social Control, and the Politics of Public Shaming." American Political Science Review, vol. 118, no. 4, Nov. 2024, pp. 1704–18. Cambridge University Press, https://doi.org/10.1017/S0003055423001053.

Nina. "All the Procrastination Statistics and Facts That You Need in 2024." *Goals Calling*, 8 Jul. 2023, https://goalscalling.com/procrastination-statistics/.

Ph.D, Bryan Robinson. "Why 78% of Workers Procrastinate Despite Increased Anxiety." Forbes,

https://www.forbes.com/sites/bryanrobinson/2024/06/02/why-workers-procrastinateeven-though-it-makes-them-anxious/. Accessed 8 Sep. 2025. Procrastination Statistics: Interesting and Useful Statistics about Procrastination – Solving

Procrastination. https://solvingprocrastination.com/procrastination-statistics/. Accessed 8 Sep. 2025.

"This Is Why Negative Reinforcement Is Effective." Verywell Mind,

https://www.verywellmind.com/what-is-negative-reinforcement-2795410. Accessed 15 Sep. 2025.