

# Team 4 - Smart Bite

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## Project Team Members

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  2. **Market Researcher:** Palmer Martin
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  4. **Devil's Advocate/Critic/"Jack of all Trades":** Hunter Mowrey, Aidan Lees
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## 1. Executive Summary (Overview)

**Smart Bite** - the app-connected wallet designed to help anyone bite their way out of economic ruin.

Specifically made for people who have trouble overspending, gambling, or making purchases on a whim without considering how much money they have, this product seeks to help anyone break this habit and save their money. Our [website](#) is designed to help users get started straightaway on their journey to "biting back" on their spending!

The way that the *Smart Bite* wallet works is that the wallet will keep track of how much money you've spent in a single day, and compare it to a limit you set prior in the mobile app. Once you get close to the spending limit, the app warns you about it. **Unique to the *Smart Bite* solution** is that if you decide to persist regardless and go over the limit, the wallet will gain sharp teeth and block access to your wallet, or begin trying to bite your hand (lightly at first) every time you attempt to access the money in your wallet, until either you add funds to recoup the balance, or the balance resets the next day. This will incentivize people to be more mindful of their day-to-day spending habits and avoid going overboard with careless purchases. Furthermore, the *Smart Bite* solution features not only positive punishment, but also positive reinforcement, as the user can be rewarded for keeping their spending under the limit for an extended period of time.

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## 2. Market Research and Need Justification

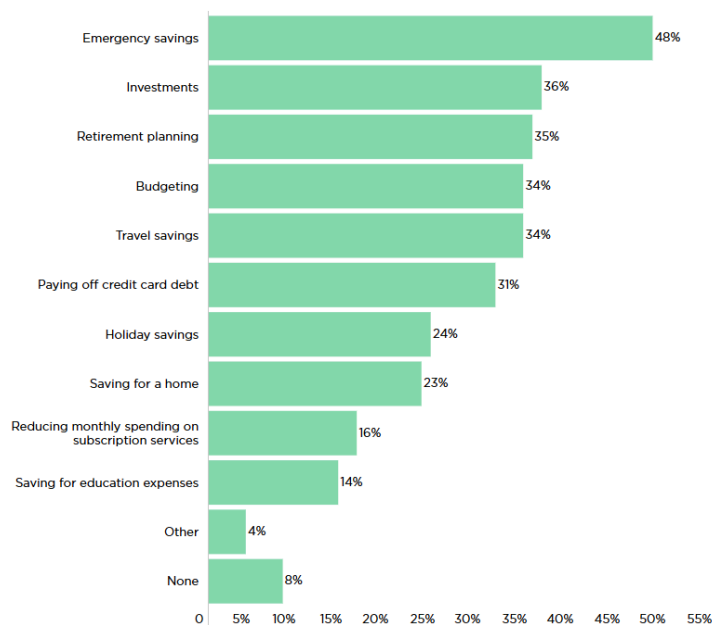
It is no debate whether Americans have far too many expenses in the modern day. As a study by NerdWallet has found, "... of Americans who have a monthly budget, 84% say they have gone over that budget at some point." ([NerdWallet](#)). Studies have found that many Americans today struggle for an average of four hours daily with thoughts and worries in regards to money, and that people of younger generations spend more time than those of older generations worrying

about finances. [Investopedia](#) This daily worry about finances also appears in a study by Middle Georgia CEO that found that many people struggle to make ends meet despite attempting to properly budget. [Middle Georgia CEO](#) This common fear of finances by many Americans shows clearly that our product has an audience to sell to and to help.

While there are many options to make payments for goods in installments, such as through credit cards or loans, these don't necessarily prevent you from wasting money, they just let you waste the money slowly over time. There are also many apps designed to help you make financial decisions such as Credit Karma or YNAB, but none of these directly prevent the user from making decisions that send them over their daily budget. If the user overspends, they aren't prevented from this, and the apps make no attempt to reward proper budgeting. Smart Bite is a direct solution to this by giving the user a light bite and closing off access to their money unless more funds are available, and by allowing the user a day to spend their money as they please after a certain amount of days without overspending as a way to reward proper budgeting.

While one might worry about whether or not the pain caused from the Smart Bite's bite is too much, we can assure you that the pain is light, like a quick needle prick. As studies have shown from the National Institutes of Health, "The experience of pain is an important part of the learning process, such as when a child learns to avoid touching a hot stove, or when a patient who underwent knee surgery learns to avoid bending his or her knee." [National Institutes of Health](#) The Smart Bite will help the user learn, "If I try to overspend, I get bit, therefore I should make sure I stay on budget and avoid the pain of the bite."

Savings, Investments top Americans' financial priorities

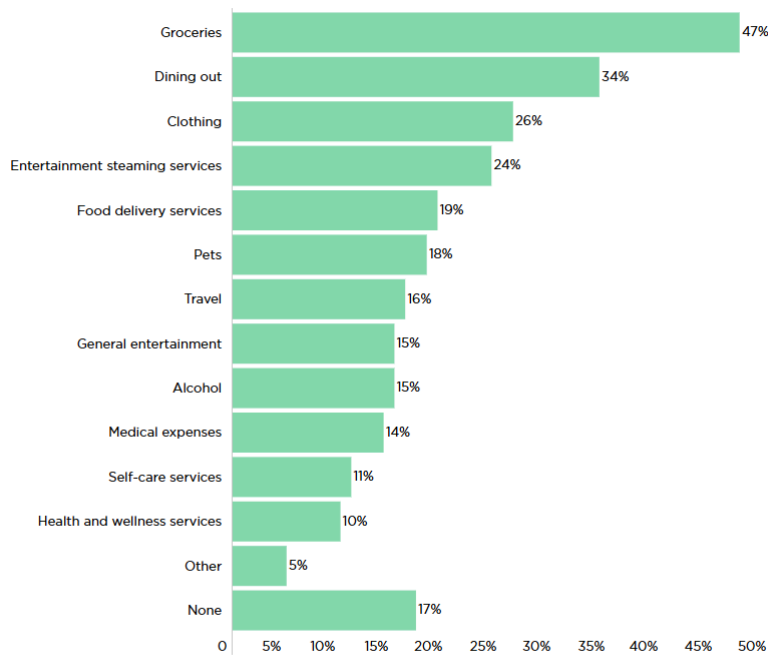


Source: NerdWallet survey of 2,070 Americans conducted online March 31-April 4, 2023, by The Harris Poll. Respondents could choose more than one answer.

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### Groceries, dining out top overspending categories



Source: NerdWallet survey of 2,070 Americans conducted online March 31-April 4, 2023, by The Harris Poll. Respondents could choose more than one answer.

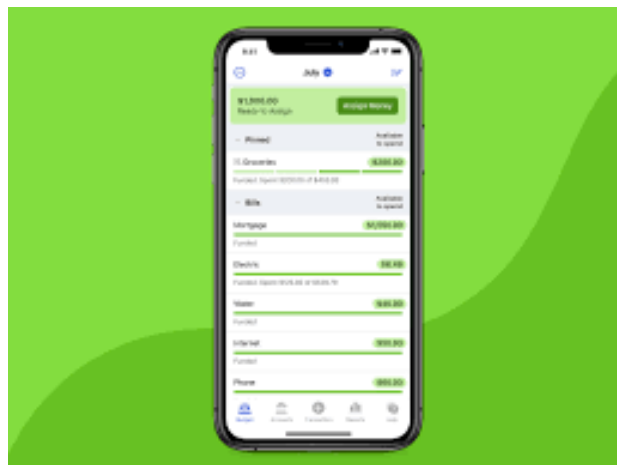
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### Current Competitors In The Market:



[Intuit Credit Karma](#)



[YNAB](#)

# 3. Product Description

## Key Features

- **Daily Spending Limit:** The user sets the maximum allowable amount of spending per day.
- **Transaction Tracking:** The app auto-synchronizes with the wallet and any attached cards.
- **Notifications and Alerts:** When the user approaches their limit, the app sends a notification with visual and sound effects.
- **Activation of “Bite Mode”:** If the limit is exceeded, the wallet activates its “teeth” to remind the user about overspending; a form of positive punishment.
- **Adjustable Bite Force:** The force of the wallet’s “bite” starts out small, and is dynamically adjusted based on the user’s sensitivity. The bite force, however, never goes beyond the pain of a typical needle prick, so rest assured there is no chance of a major injury.
- **Analytics and Reports:** Charts, statistics, and recommendations are made available to the user to help improve their financial habits.
- **Positive Reinforcement:** The user can earn rewards for discipline (for instance, if they don’t exceed their limit for a full week). Rewards can come in the form of, for instance, being allowed to spend extra for a day or two every month.

## UI/UX Approach

- **Target Audience:** Anyone aged 18-35 years, who are prone to impulse purchases
- **UI Style:** Futuristic, yet minimalist graphics with a light design and neon highlights.
- **UX Solutions:** Simple first-time setup, spending progress visualized (via a circular chart on the home screen), and interactive elements that enhance the user experience.

## Innovations and Differentiators from Competitors

- **Physical Feedback:** The wallet itself physically reacts to overspending by activating its teeth once the user has overspent; a feature not found in similar products.
- **Financial Gamification:** Users are motivated not only by restrictions but also by “playing the game” for as long as needed.



Ready to take control your

## Smart Bite



Get Started

## Wallet

\$1,250.50

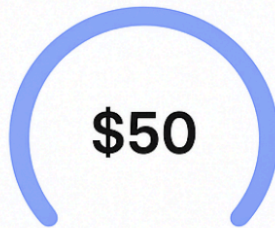
Recent transactions

[See all](#)

	Potatoes	\$4.00
	Food	\$35.20
	Taxi	\$23.00

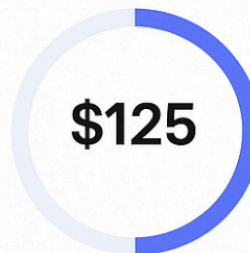
Add money

## Set a Daily Limit



Set Limit

## Track Your Spending



Daily Limit

\$50

✓ Exceeded the limit!

Done

## 4. Possible Issues and Counterarguments

### **Competitors:**

There are multiple competitors in the same market that have much similar ideas to our product, using applications and websites rather than our idea of a physical product. Such competitors include YNAB, NerdWallet, and Intuit Credit Karma. Because of this, there is doubt about the need of the Smart Bite because of the existence of easy to access websites and applications that do the same thing.

### **Technical/Financial Challenges:**

There might be issues on how to effectively add this “bite” into a wallet, and how to make it work effectively while also keeping the product within financial limits. Use of sensors can work, but could prove to be buggy or ineffective. Using teeth (while not always financially an issue) can be a technical issue, such as considering how the teeth would be inside the wallet and come out once the user has overspent, and how to effectively tell when the user has overspent.

### **Solutions:**

Competitors may have an advantage when it comes to apps and websites, but as a group we can use both physical product and application to show why Smart Bite is the best way to manage your money and prevent overspending. Using an app for Smart Bite would also solve our technical issues and financial issues, making it so the bite is linked to when the app detects overspending, rather than implementing a way to detect overspending in the wallet itself. There is also a way to avoid the whole “teeth” problem, where the teeth are just part of the wallet’s general design, instead of needing to be something that is brought out when overspending is detected.

### ***Why would I want a wallet to “bite” me? Doesn’t that hurt?***

Smart Bite’s “teeth” should never break skin, so you’re kept perfectly safe while also experiencing negative feedback for overspending. The user also knows and sets their own financial limits; there’s no reason for Smart Bite to chomp down unless the user breaks their spending threshold. The pain caused by the bite is also very temporary, being similar to that of a small needle prick, just due to human nature of not learning properly unless there are consequences. So any pain that comes from it is temporary, and completely safe to any user. On top of this, we also make the bite force adjustable from user to user, depending on if they feel like the pain is either too much, or not enough to keep them from overspending.

### ***Wouldn’t it be easier to keep track of my own financial spending without having to buy a new wallet and set up an app?***

Not at all. With currency being both physical and digital in modern day society, it’s difficult to keep a good record of every dollar spent. Sure, banking apps exist for credit card transactions, but sometimes you don’t always get the chance to write down every physical transaction you make. Smart Bite acknowledges both the cash inside itself and the funds in any linked bank accounts so that there’s no circumvention of the user’s spending limit. Smart Bite’s quick and easy

setup is far more efficient than creating a spreadsheet from scratch and manually tracking purchases, and it automatically keeps record of when money leaves the wallet or your account.

***Can't I just change my spending limit whenever I want?***

Not exactly. Of course, we don't want to lock our users to one exact spending limit for the entire time they own our product. However, we also can't allow users to change how much they can spend per day whenever they want. That would defeat the entire point of our product. That's why, when you want to change your spending limit for a day, you have to give a reason before being able to change your spending limit, as well as confirming how much you want to change it by. An integrated AI would use this information to instantly determine whether your reasoning is justified enough to allow adjustments to the spending limit. An example of this includes; a vacation trip, changing your limit from \$50 to \$300 to be able to actually afford the trip instead of being bitten.

To further ensure that this system is not abused, it's a limited number of times you can change your limit per day (such as 2-3 times). This way, you're able to change the spending limit when you need to, but can't abuse this as to be able to never get bit and continue to overspend. Furthermore, that same integrated AI system is used to detect whether the limit-changing function is being abused to allow for careless spending, which will also trigger the "bite" function.

***Why should I even buy this?***

There's many reasons as to why you should buy our product. First, once you buy our product and set up the app, there are no needed subscription services or unnecessary fees. It's a one time purchase for infinite use of our product. Secondly, we acknowledge that there are people that don't like the idea of a wallet that bites you, either for the use of negative enforcement or other reasons (Team 3). And, to start off, there is an amazing positive reinforcement feature that encourages you to not overspend on top of the biting mechanic, being able to get 1 day of being able to overspend with no consequences if a certain amount of time goes by without overspending (times needed may vary by user). And on top of this, we will make sure to have a Terms of Service for our product so you know everything that is included and what is acknowledged when buying our product.

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## **5. Conclusion and Recommendations**

Today, especially with mobile tap-to-pay solutions, online stores, and one-click checkout processes, far too many people have become careless in how much they're spending without realizing until it's too late. The *Smart Bite* wallet seeks to change this by going beyond the traditional money-saving app and introducing an incentive (in the form of your wallet biting back at you if you attempt to spend over the limit) to keep users' daily spending in check.



This has the main benefit of keeping users' finances under control, by ensuring that their money is not spent carelessly, but rather carefully. Furthermore, the unique features of this product has the long-term effect of changing the end user's habits and their thought processes behind making purchases, as well as leaving users happier that they avoided making unnecessary purchases and instead saved more money that could be put to better use.

We believe that the development of this app and product should move forward because overspending and impulse buying is a major problem in today's society, and we see this solution as one that can be greatly effective in turning people around into more mindful spenders.

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## 6. Appendix

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