

# **Marsupium**

## **Product Development Brief**

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# 1. Problem Analysis

Financial stress is an ubiquitous problem in today's world. Whether it stems from difficulty in finding employment, escalating debt, unexpected expenses, or a combination of these factors, financial worry is one of the most common sources of stress in the modern day. According to the WeMoney Financial Wellness Survey (2021), 30% of Australians live paycheck to paycheck, with 60% worrying about debt.

## 1.1. Users

There are many reasons why people may struggle with their finances, with some of the most common reasons being the lack of a budget, lack of financial goals, and lack of financial knowledge. To combat this, our aim as Marsupium is to educate children on the importance of financial literacy, so that they can grow up to be more fiscally responsible, thus reducing their financial stress. Since financial literacy is applicable to most people, everyone will be able to use our app to build their financial knowledge, but our main goal at this stage is to help parents with educating their children to be financially literate.

According to a study from the Center for Financial Services Innovation, more than half of Americans aged 18 to 25 have expenses that are equal to, or more than, their income. Furthermore, with the proliferation of financial technology (fintech) startups, such as Buy Now Pay Later (BNPL) services, many young adults have exhibited a lack of financial knowledge. According to a study done by the Australian Securities and Investments Commission (ASIC) (2020), 67% of all Gen Zs have used some form of BNPL in the past 6 months, with 20% of users resorting to cutting back on essentials such as food to make their BNPL payments. This demonstrates that many young adults lack financial planning in their expenditure, stemming from a lack of financial education.

## 1.2. Jobs To Be Done

The core job that Marsupium was created to do is to educate the youth in financial literacy. To do this, we aim to build saving habits in children from young, as a gateway for them to begin thinking about their money and how to manage it. To facilitate this, parents will be able to track their children's savings, to provide further encouragement for their children. Additionally, we hope to educate children on the different techniques that companies use to get their money, such as the loot box mechanic, or pricing structures.

## 1.3. Solution

We have designed our app, Marsupium, to fulfill the jobs to be done as follows:

- **Build Saving Habits in Children**

In order to incentivize children to log on and report their daily savings, Marsupium offers rewards in the form of digital collectibles, with better rewards for daily usage. By tapping into the innate human desire to collect, we hope to give children more exposure to saving, to build a habit of being financially responsible. Furthermore, since collecting can also have a social aspect, we hope that children will be able to compare their collections with their friends, encouraging each other to save more (Spaid 2018).

- **Allow Parents to Monitor Their Children's Savings and Expenditure**

Our application uses a subscription service, with a 1-month free trial for each. There are 3 types of accounts, the basic with 1 account, and the standard and premium, with up to 3 and 6 accounts respectively. Using this model, the main account on the parents' phone will act as the administrator, being able to track the savings of their children, as well as being able to acknowledge each entry that the child inputs.

It is possible to expand this in the future, where we can make use of Open Banking to track the expenditure of users too, directly through their debit or credit

cards. Using this method, it will be possible to track the user's expenditure based on category, such as food, travel, or entertainment, which can then be used to give users more specific saving advice.

- **Educate Children on Techniques That Encourage Spending**

One of the key inspirations for Marsupium is the rise in popularity of "gacha" games, and the prevalence of loot box mechanics in popular gaming titles. These games generate millions of dollars in income each year, by locking most of the playable characters, items, or cosmetics behind loot boxes, such that it is impossible to simply pay for what you want in the game, but have to 'roll' for it. This business model lies within a grey area of what is considered acceptable, with the German federal parliament passing a law which raises the classification of any game with loot boxes or similar mechanics with an age rating of 18+ (Narayan 2021). The European Parliament Committee on the Internal Market and Consumer Protection (IMCP) has also warned about the dangers of such mechanics, citing parallels to gambling, as well as the potential of addiction (Taylor 2020).

By applying this principle to saving instead, we hope to educate users, especially children, on common techniques that games use, so that they can be more well-informed about how companies make their money, and make better decisions when choosing to spend their money.

Other common tactics that games use include customization options such as skins. Whether to show off to others, or for one's personal enjoyment, skins have become universal in the gaming world, especially as a means of profit for freemium games, such as League of Legends, which generated \$1.75 billion in revenue in 2020 (Clement 2022).

We at Marsupium also plan to add cosmetics to our characters, such as golden characters or seasonal themes, but at no monetary cost, as a means to reward

early adopters and keep the game fresh and exciting. Through our cosmetics, we hope that users will be able to be more perceptive when other games use similar tactics at a monetary cost, so that users may have healthier purchasing behaviors.

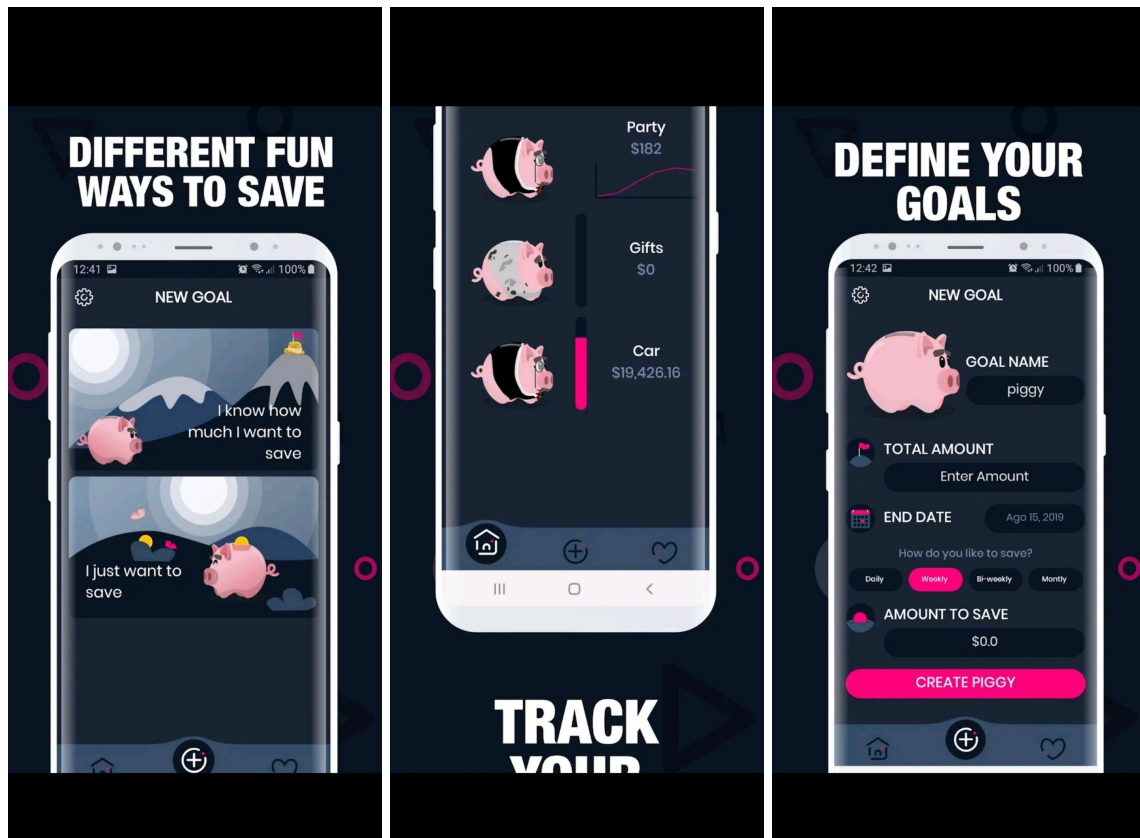
#### **1.4. Competition**

While there are many saving apps on the market, none are similar in appeal to what we are aiming for in Marsupium. Apps such as “Piggy Goals: Money Saving” and “52 Weeks Money Challenge” allow users to set a saving goal, or simply track their savings. While these apps may be useful tools for people interested in saving, they do not provide any extrinsic value to the user. Users need to be intrinsically motivated to download these apps, but since our main target demographic is children, we do not expect them to have the intrinsic motivation to learn to save. Instead, we believe that by providing rewards of digital collectibles, children will have greater incentive to build their saving habits.

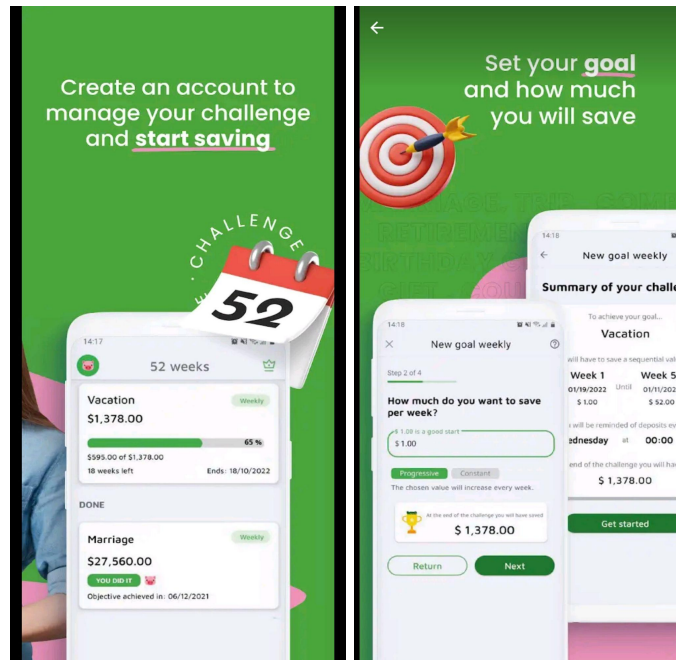
In terms of providing extrinsic rewards to saving, there are apps that do it, such as “Finder” and “WeMoney”, but we believe that the core functionality of these apps do not apply well to children. For “Finder”, the app provides an interest of 4.01% per annum, which may be an enticing offer, but comes with its own set of problems. Firstly, “Finder” requires the user to put their money into the app, which most children may find difficult, since most of their money is in cash. Secondly, children generally do not have much capital, and thus would not be able to benefit much from the interest payments. Thirdly, since the interest payment is annual, children lack the incentive to update their savings daily, thus being unable to create the habit of saving. “WeMoney”, similar to “Finder”, was designed as an app to help users manage their money, allowing users to track their wealth through their earnings and expenditures, as well as helping them keep track of their subscriptions. However, similar to “Finder”, the functionalities of “WeMoney” are not very relevant to children.

Finally, there is the category of saving apps targeted to children, such as “Gimi” and “Chores & Allowance Bot”. “Gimi” is similar to the first two apps mentioned, as it allows

users to set a savings goal, as well as track the chores they need to complete. However, the app does not provide any reward for saving, also much like the first two apps mentioned above. The app which shares the highest degree of similarity with ours is “Chores & Allowance Bot”, which uses a robot theme to help parents track their childrens’ allowance and chores. While this app also gamifies saving and chores for children, and allows parents to manage their children, it lacks the key feature of collectible assets present in Marsupium. Additionally, while it may be more convenient for parents to combine allowance and savings, it can also lead to children associating saving as a task they have to do, not something they should make a habit of. Finally, the pricing for this app starts at \$4.69, with a 7 day free trial, alongside a free version that lacks many of the key features. While the pricing is reasonable for most parents to pay, we want to be able to target families from all financial backgrounds. Thus, our pricing for Marsupium starts at \$1 monthly for a single user, \$2 for up to 3 users, and \$4 for up to 6 users, with a 10% discount for paying annually. We believe that with a lower price, not only will more people try out the app, they will use it for longer, thus further helping build a habit of saving.

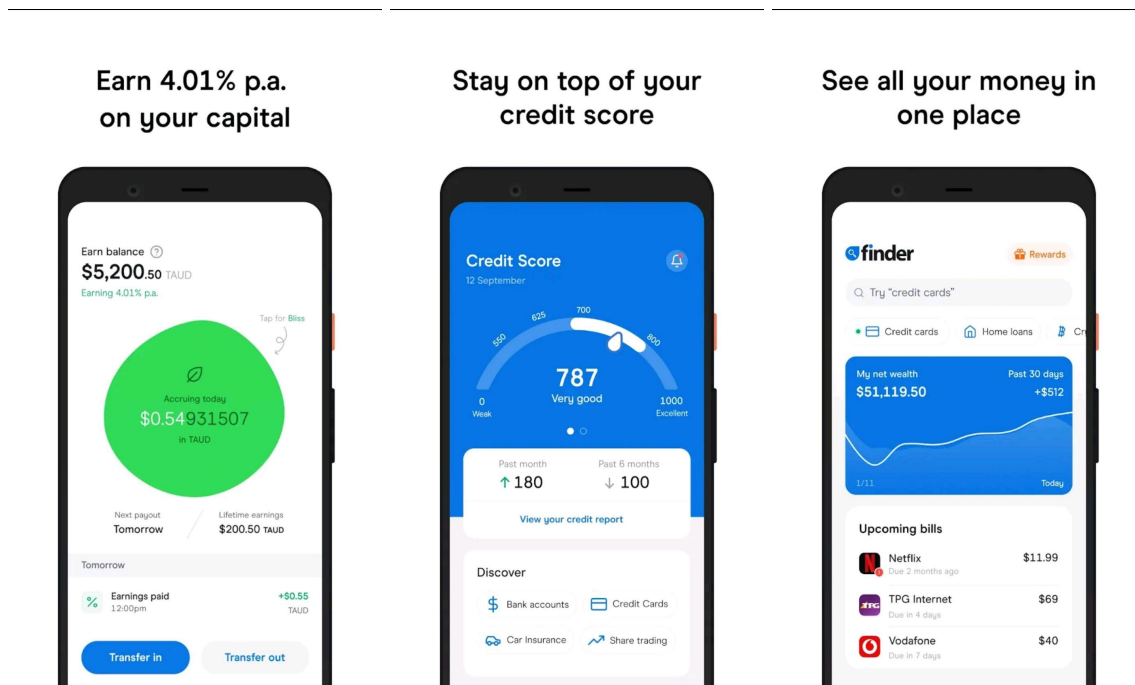


Example 1: Piggy Goals: Money Saving (100K+ Downloads Google Play Store)

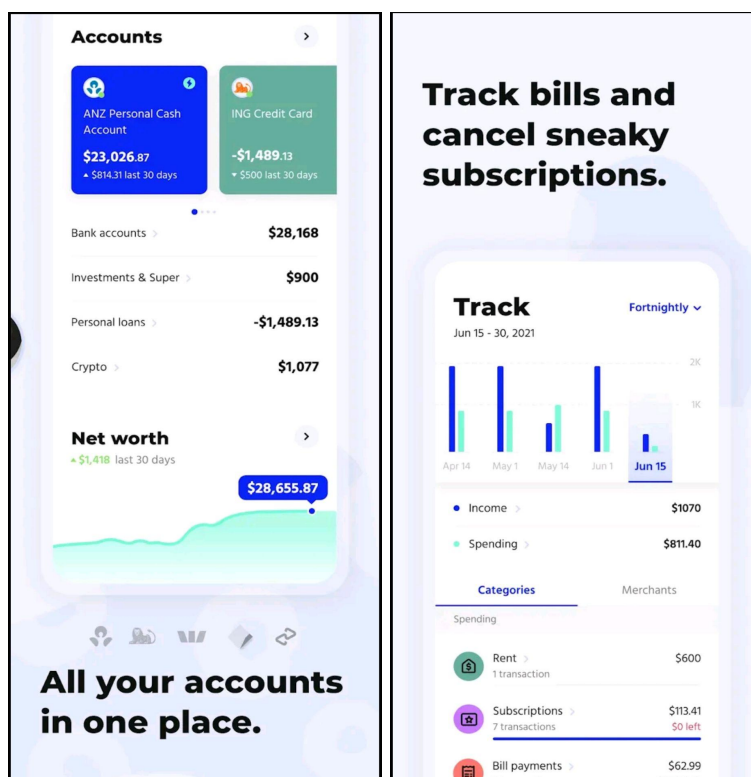


Example 2: 52 Weeks Money Challenge (1M+ Downloads Google Play Store)

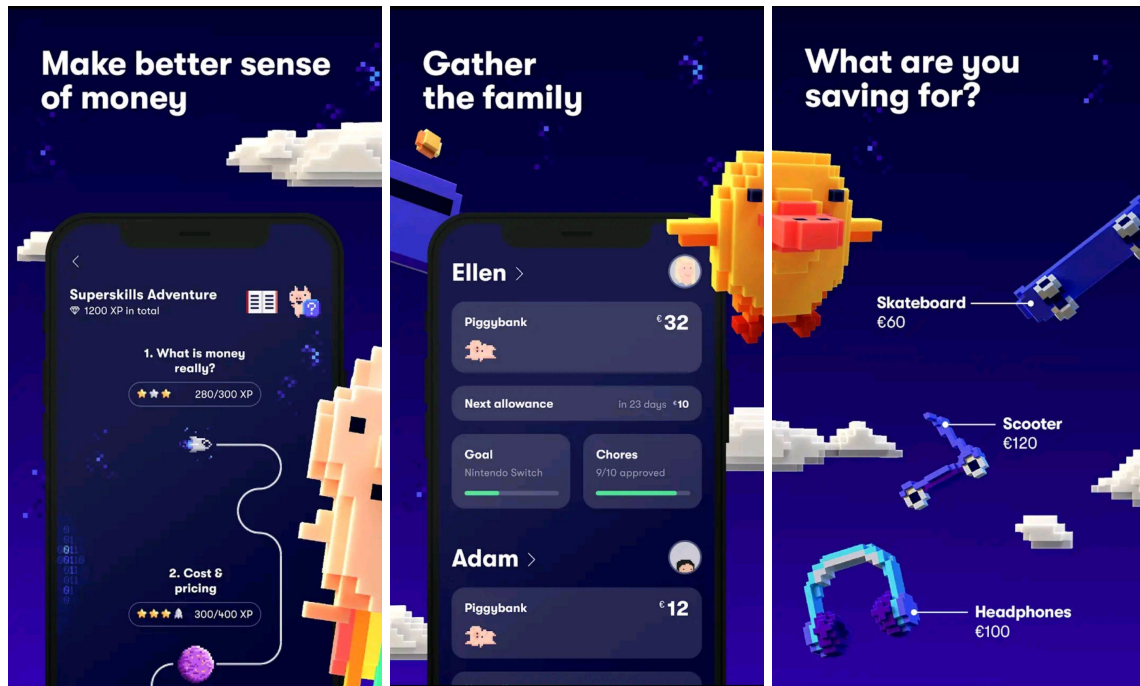




*Example 3: Finder (100K+ Downloads Google Play Store)*



*Example 4: WeMoney (50K+ Downloads Google Play Store)*



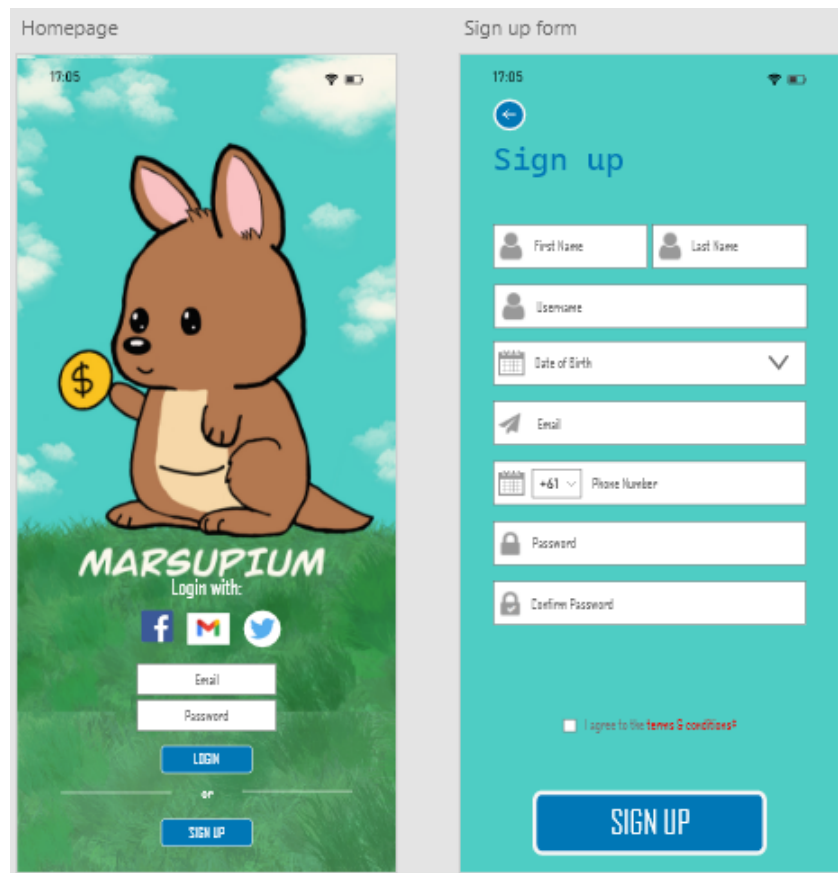
Example 5: Gimi (100K+ Downloads Google Play Store)



Example 6: Chores & Allowance Bot (50K+ Downloads Google Play Store)

## 2. Solution Illustration

### 2.1. Application Map



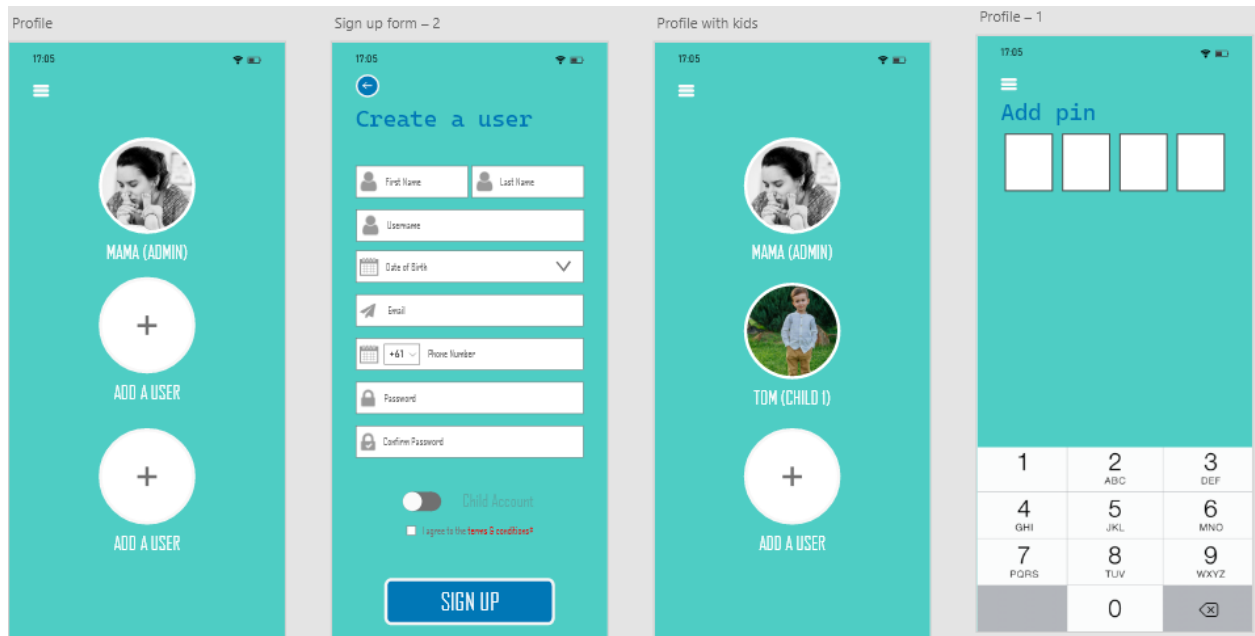
Login/Signup Page

When users first download Marsupium, they are given the option to login using their social media accounts, or to sign up for an account with us.



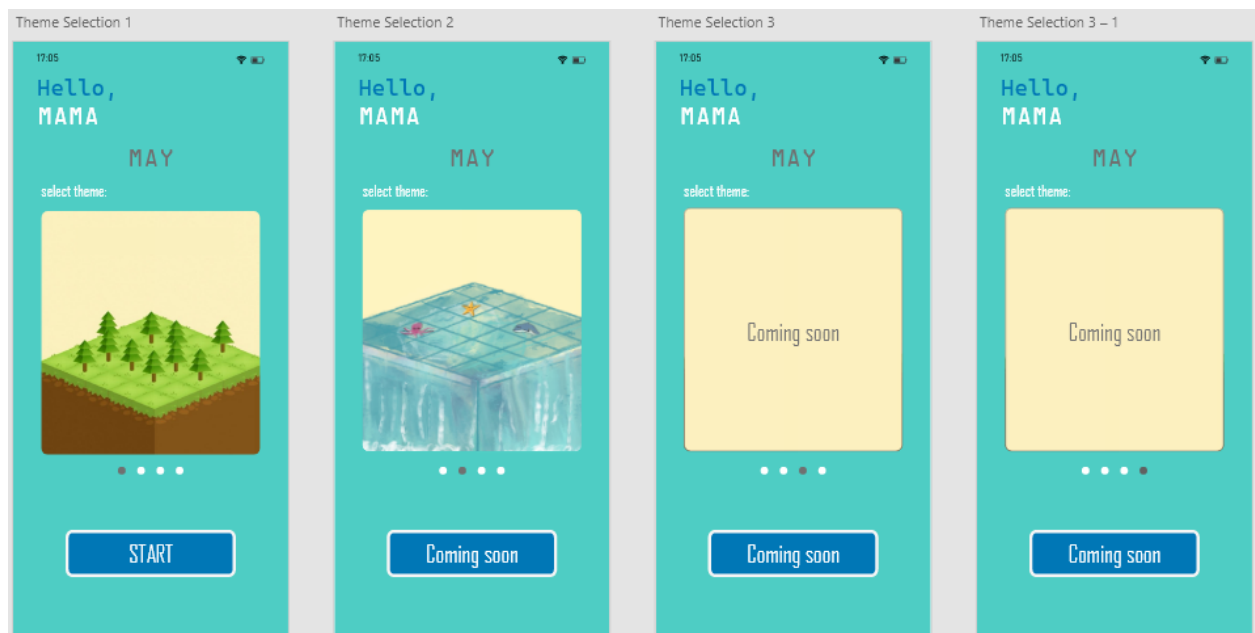
## Select Subscription Plan

After signing-up, users will be directed to the subscription page, where they select the plan they are interested in. Each plan will have a 1-month free trial, which can be cancelled at any time.



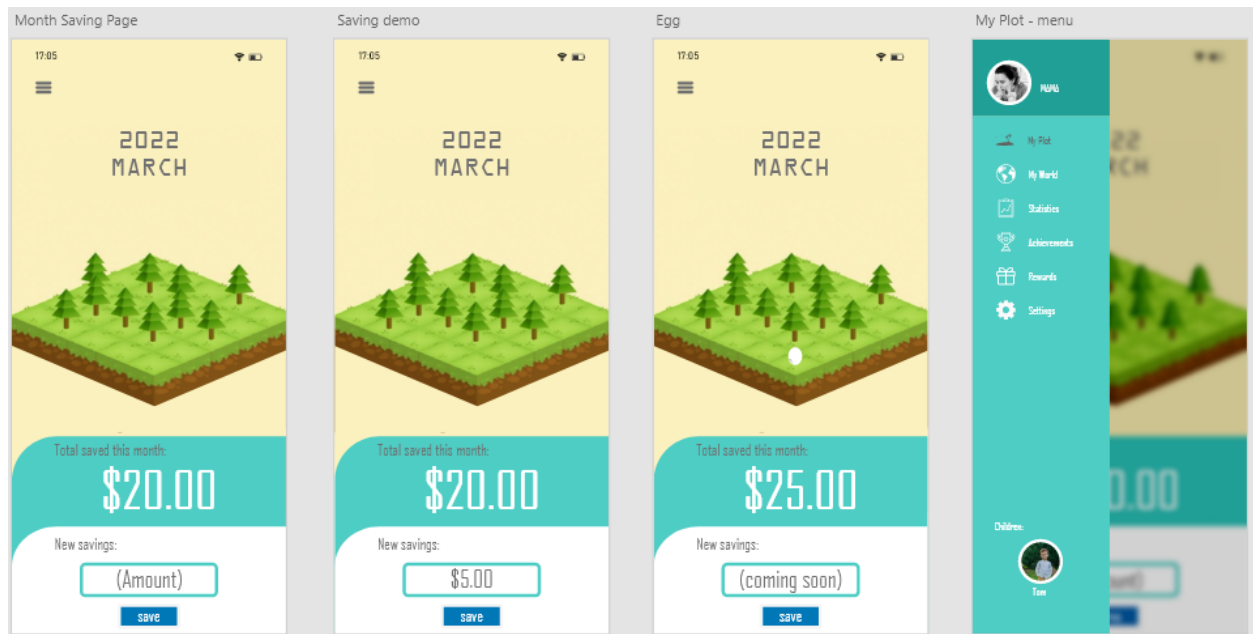
## Profile Management

Account holders will be able to create more profiles depending on the plan they subscribed to. The first profile will function as an administrator, with the power to create and manage other profiles in the same account. Users will be able to create a pin for each of their profiles.



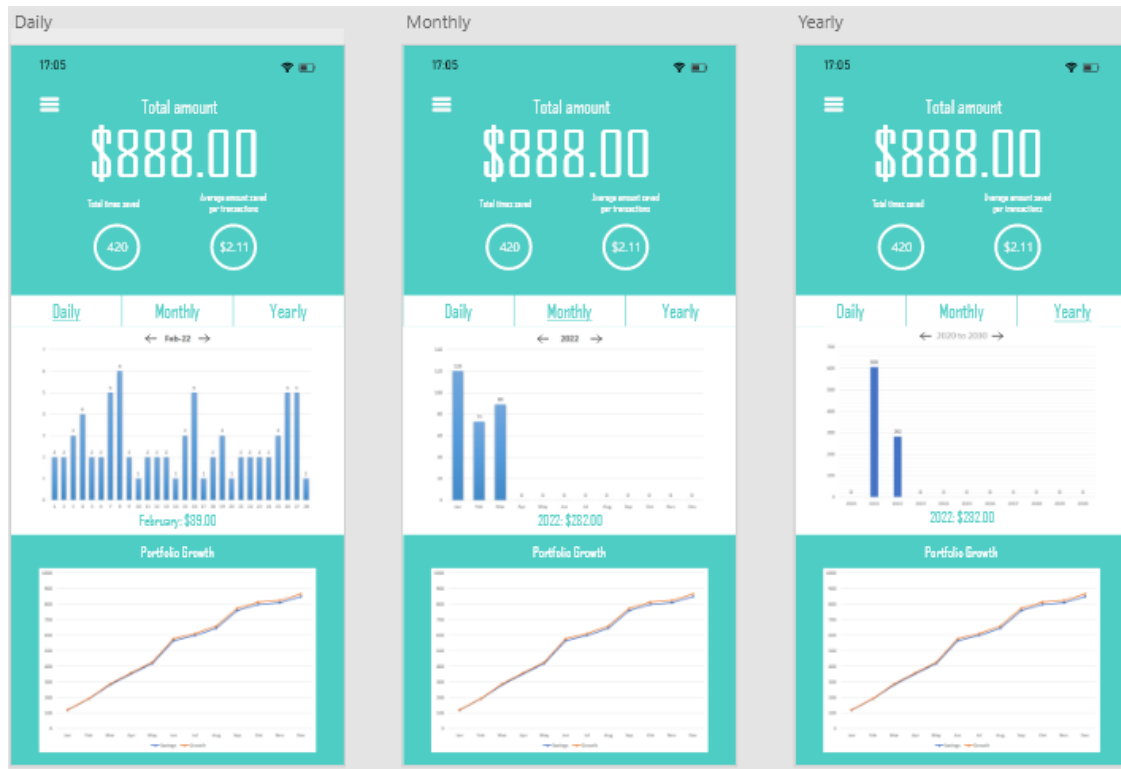
## Theme Selection

At the start of the month, or when the user first accesses their account, they will be able to pick a theme of their choice and start growing their world.



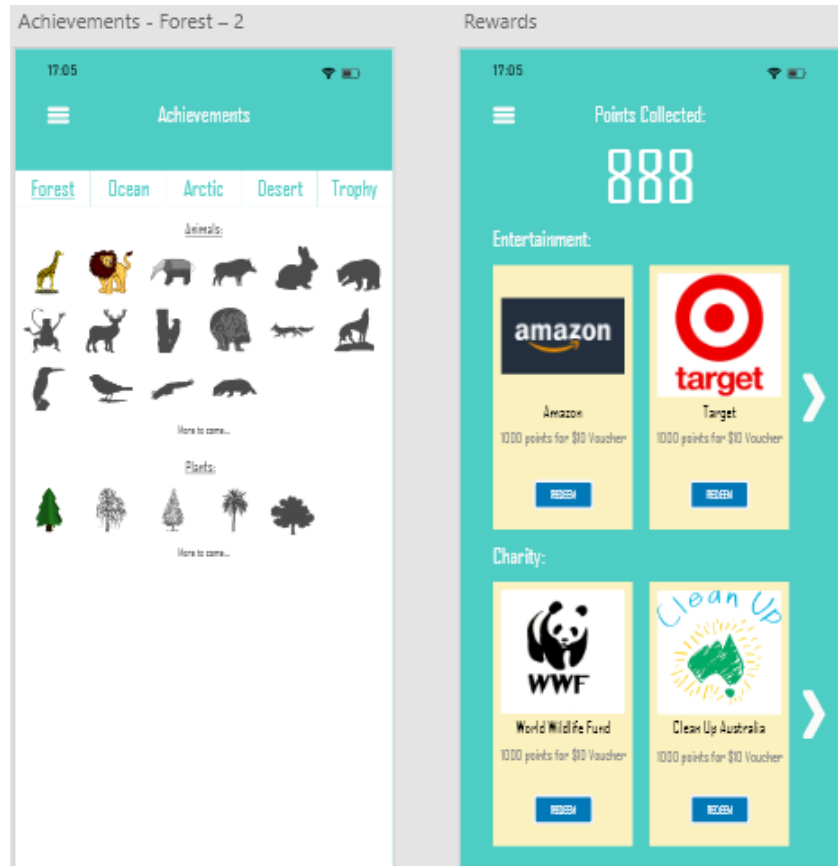
Home Page

The home page is where users have access to the key features of the app, being able to view the savings for the month and add to it. Users will also be able to see the results of their savings, in the form of animated characters populating their plot of land. Parents are able to save along with their children and have access to their children's portfolio. As shown in the image on the far right, parents are able to click on their child's icon to access their child's account.



### Saving Statistics and Projections

Statistics are available for better understanding of saving datas. The administrator can access the statistics of their children's profiles. Based on the previous saving statistics, projections of future savings will be provided.



Achievements Page and Rewards

Based on the collectibles unlocked, they will be colored in on the achievements page, while others will be greyed out. This will hopefully foster a sense of completionism in the user, motivating them to keep up their saving habits. As a potential expansion of our concept, we can help users start exploring the world of investment, once they turn 18. From these investments, users will gather dividends in the form of points, which can be spent on either gift vouchers, or as donations to charitable causes. We hope to partner with brands such as Coles or Woolworths, such that they can provide some of the rewards for the users as incentives. For the charity aspect, we hope to expose users, especially children, to social causes, so that they can better understand the world around them, and potentially help donate some of their rewards to support these organisations.



## **2.2. Design Features**

As mentioned in 1.3, where we utilise gacha mechanics, we are also implementing a variation of the Pomodoro Technique. The Pomodoro Technique is a time management system that encourages people to work with the time they have. Using this method, the work day is broken up into time blocks. This provides users a better understanding of how their time is utilised, hence making their day more productive. An example of this technique in action is the “Forest Focus” application. “Forest Focus” allows users to clock in a time to set their phone aside. If they are successful in putting their phone away to be productive, they are rewarded with a virtual tree to be planted on an empty plot of land. As the user spends more time away from their phones, their forest will grow.

Marsupium adopts this technique and applies it to saving. Rather than setting an overall saving goal, for example saving for a new bicycle, we encourage users to save everyday. Instead of a larger, seemingly more insurmountable saving goal, we believe that by breaking down the saving goal to something that is more achievable in the eyes of the user, they will be able to better realise their goals. This will also help users better build a habit of saving; rather than abandoning their long-term saving goals for being too far out of reach, users will be better motivated to achieve their goals for the short term. Whenever a person saves an amount for that day, they will be rewarded with an egg or seed. Depending on the users’ streak of saving, the egg or seed will reward them with collectibles of greater rarity.



Different Collectibles Available

These will be some of the collectibles available for collection. The cute and simple designs help to appeal more to our main target demographic: children, while the variety can serve to educate children more about the different animals found around the world.

### **3. Solution Description**

#### **3.1. Functional Descriptions & Technical Considerations**

Once users download the Marsupium app, they will be prompted to create an account, using their personal details and email address. Then, they will choose their subscription plan, of basic, standard, or premium. Each of these will have a free trial period of 1 month, and cost \$1, \$2, and \$4 respectively. The basic plan will only support 1 account, for individuals who simply want to keep track of their own personal savings. The standard and premium plans, however, will allow the user to create more accounts under their plan, which will be managed by the main account. At this stage, parents who wish to create a profile for their children will be able to register their children for a profile, and will be given a linking code, which can be used from the child's device to connect them to the parent.

The parent account will have full functionality: the core saving functions, the statistics, achievements, rewards, etc. The parent will also be able to access all of the information of their children's profiles. The child account, however, will not be able to access the billing information, or anything related to payment.

In terms of technical considerations, since financial data is a very sensitive topic, and needs to be kept confidential, Marsupium will have all data encrypted before storing in a secure database. Additionally, users may opt to add a passcode to their app on startup, so that information about their savings is kept more securely.

Another key technical consideration is the movement of collectibles in the game world, once they have been collected. In order to keep the child engaged in using the app, all of the collectibles gathered over the course of the month will roam freely in a theme of the user's choice. This can raise several challenges technically, as the characters may collide with each other, they may cause lag as more are collected over the course of the month, or it may simply not be appealing enough.

### **3.2. Development Costs**

Since two of our three members of Marsupium come from a computer science background, we will be able to construct the app on our own, using the Unity game engine. Thus, the only costs we will incur for development would be the time costs, as we balance our obligations as university students with the development of this app. Additionally, since neither of us are very experienced in app development, we expect to run into many challenges along the way.

If we were to outsource our coding, we expect that an app of our size would cost \$80,000 to \$120,000, taking around 4-6 months to complete. Furthermore, as mentioned in the technical considerations above, it is imperative that our main page, the animated collectibles, are appealing, or we would lose our edge against the competition. As such, we have decided to do the coding ourselves, to ensure the quality of our product.

Registering our business and licensing our product will incur additional costs as well.

### **3.3. Timeline**

For our minimum viable product (MVP), we plan to create the structure of the saving app, with some collectibles implemented, and limited movement of characters. This MVP will be able to sufficiently distinguish our product from those of our competition, while allowing us to push our product to market quickly, in order to receive user feedback. Given our current progress on the app, we should be able to launch a working MVP within 3 months, but since there is a 1 month free trial period for every user, it may take longer before we can gather useful feedback, or start generating revenue.

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