

Digital Media Project - App Design - Grovi

App Concept

Grovi is an innovative app designed to empower users to actively contribute to environmental conservation, with a specific focus on forest (woods) protection, through their daily consumption and eco-friendly actions. The app enables users to record their environmentally friendly behaviors, translating them into tangible environmental benefits such as planting real trees or receiving redeemable coupons.

Grovi not only encourages individual responsibility for a sustainable lifestyle but also cultivates a sense of community engagement, allowing users to collaborate for a collective impact on forest protection and overall environmental well-being.

Background Research

Aligned with Sustainable Development Goal 15: Life on Land, Grovi addresses the pressing issue of forest protection. The urgency stems from the need to establish a harmonious relationship between humans and nature, mitigating challenges such as endangered species extinction, deteriorating land health, and rampant forest loss.

Enhancing biodiversity and promoting sustainable use of terrestrial ecosystems are crucial steps toward achieving a balanced and resilient coexistence between humanity and the natural world.

Aim and Objectives

The aim of Grovi is to create a user-friendly platform that motivates and assists users in actively participating in environmental conservation activities, thereby fostering awareness of environmental protection, and encouraging the adoption of sustainable lifestyles.

- **Raise Environmental Awareness:** Increase users' awareness of environmental protection issues, with a specific focus on forest conservation. To educate users about the impact of their daily consumption behaviour on forest.
- **Encourage Sustainable Lifestyles:** Motivate users to adopt eco-friendly behaviors in their daily lives, emphasizing actions that contribute to forest protection. Incentivize the reduction of carbon emissions through sustainable choices, fostering a culture of responsible consumerism.

- **Community Building:** To create a vibrant community within the app where users can share experiences and tips related to forest protection. To facilitate collaborative efforts among users to collectively contribute to forest protection.

Problem Statement

- **Who:** The target audience for Grovi includes environmentally conscious individuals, spanning various demographics, who are already aware of environmental issues but may lack sustained motivation or practical guidance for eco-friendly living, specifically related to forest protection.

- **What:** Users face a lack of motivation and accessible resources to actively participate in environmental activities. Difficulty in finding trustworthy information and practical recommendations to enhance eco-friendly practices in daily life. Individuals, despite their environmental consciousness, encounter challenges in maintaining consistent sustainable habits.

- **Where:** The issue extends both in digital and physical spaces. Users will primarily use the Grovi app for guidance and motivation in their daily consumption and eco-friendly behaviors. The app serves as a digital platform to bridge the gap in information and resources related to sustainable living.

- **Why:** It is crucial to address this issue because individuals with environmental awareness often lack a continuous source of motivation and specific guidance. Grovi aims to provide a comprehensive solution to enhance users' eco-friendly behavior in their daily lives.

Market Research

- **Target market:** all 16–50-year-olds who use mobile phones
- **Market size:** medium, getting bigger.
- **Geography:** Global
- **Future Trend of the Market:** Future trends in the market: With the gradual promotion of "carbon trading" and the government's conscious efforts to guide enterprises to reduce carbon emissions, redeeming "carbon coins" by accumulating points may become a new trading method in the future.
- **Market environment:** The software "Ant Forest" dominates the market, and Alibaba has also developed a number of low carbon and environmental protection software based on "Ant Forest", such as "88 Carbon Account" and "Low Carbon Account". Alibaba has also developed many similar low-carbon environmental software based on "Ant Forest", such as "88 Carbon Account" and "Low-Carbon Planet", and similar software such as "Forest Focused Forest". Currently the market demand is small, but

as environmental protection becomes more and more important, the market will expand.

- **Marketing strategy:** Carbon Trading and Carbon Currency" as the main theme, and "Carbon Currency" can be traded by earning points through daily attendance and other aspects.
- **Promotion:** Promote through user groups and advertisements, and use celebrities or internet celebrities to promote.

SWOT Analysis

- **Opportunities:** "Carbon trading" and "carbon money" are still in their infancy, and will become a new form of trading if successfully realised.
- **Threats:** External pressure, easy to be monopolised by leading companies.
- **Strengths:** small number of similar software and increased user freedom.
- **Weaknesses:** inability to attract a large number of new users quickly

PESTLE Analysis

- **Political:**

(1) The UK government released the programme 'A Green Future: Our 25 Year Plan to Improve the Environment' in 2018, which will help in the development of Grovi.

(2) According to the UK policy, there will be some financial support for the development of new software.

- **Economic:**

(1) The size of the environmental software market is steadily increasing along with the global awareness of environmental issues and the growing concern for environmental protection.

(2) In recent years, along with the slow decline of residents' incomes, the rise in oil prices also means that public transport is gradually becoming more important.

- **Social:**

(1) Increased awareness of environmental protection will drive the demand for environmental protection software, therefore, software related to environmental protection will receive more attention.

(2) The UK government and society's pursuit of sustainable development will also promote the development of environmental software.

- **Technological:**

(1) The application of artificial intelligence, big data analysis technology and other technologies can make environmental software more intelligent.

(2) Data security and privacy are also important considerations for environmental software, and how to protect users' data is an important consideration.

- **Environmental:**

(1) Global desertification and forest degradation is a growing problem and remains a very serious issue despite the gradual increase in environmental awareness

- **Legal:**

(1) Data privacy: with the user's personal privacy and data collection and other aspects need to comply with relevant laws and regulations.

Competitor Analysis

The competitor analysis will help to reference the design style; identify the specific strengths; discover things that can be learned or absorbed; identify issues to be avoided.

Competitor 1 (Alipay's Ant Forest):

Features & Functionalities:

- Step Cultivation: Records users' daily step counts. Encourages physical activity for health benefits while contributing to environmental conservation.
- Energy Generation: Users can generate energy by performing daily environmental protection actions. Promotes direct user involvement in eco-friendly activities, linking personal actions to environmental impact.
- Energy Collection: Users can collect energy from the Ant Forests of their friends. Fosters social interaction, mutual support, and a community-driven approach to environmental conservation.
- Tree Planting with Energy: Converts accumulated energy into funds for tree-planting projects. Transforms individual eco-friendly actions into tangible contributions, enhancing user satisfaction and accomplishment.
- Community: Users can steal the energy from their friends or build a room to collect the energy with their friends together.

User Base:

- Alipay's Ant Forest targets users focus on the users of Alipay which is Chinese. Ant Forest has a substantial user base, leveraging Alipay's extensive reach and popularity. Alipay is anticipated to maintain their dominance as leading mobile payment methods in China, with projections indicating a collective user base of nearly 2.5 billion users.

Interaction:

- Community Engagement: Ant Forest promotes social interaction and collaboration among users through energy sharing and tree-planting initiatives which can be recorded when they use Alipay complete the payment.
- Personal Engagement: Users are actively engaged in both physical activities and eco-friendly behaviors, fostering a sense of personal and collective responsibility.

Design:

- User-Friendly Interface: Ant Forest features a user-friendly interface, making it accessible and appealing to a wide audience.
- Visual Appeal: The app employs visual elements and progress tracking to enhance the user experience and motivate continued engagement.

Social Integration:

- Energy Sharing: Integration of social elements allows users to share energy with friends, fostering a sense of community and social responsibility.
- Social Media Presence: Users can share their environmental contributions on social media, expanding the reach and impact of the app.

Advantages:

- Holistic Approach: Integrates health, social, and environmental aspects for a comprehensive user experience.
- Tangible Impact: Transforms virtual actions into real-world benefits, providing users with a sense of accomplishment.

Disadvantages:

- Dependency on User Participation: The success of the function heavily relies on user engagement and consistent participation.
- Limited Environmental Focus: While tree-planting is a significant initiative, the app might have limited focus on addressing broader environmental issues.
- Complex User Interface: The multitude of functions contributes to a less clear interface, potentially hindering users from seamlessly completing actions and diminishing overall user interest.

Conclusion:

- Ant Forest, as a competitor, excels in creating a well-rounded platform that effectively merges personal well-being with environmental conservation. Its success lies in the seamless integration of features, fostering a community-driven approach, and providing tangible incentives for users. The app effectively leverages social and environmental consciousness to drive positive actions, contributing to a sustainable and eco-friendly lifestyle.



Competitor 2 (Ecosia Search Engine):

Features & Functionalities:

- Ecosia functions as a search engine with a focus on environmental conservation.
- Users contribute to tree-planting initiatives by conducting searches, aligning online activities with eco-friendly actions.

Tree Planting Counter:

- Ecosia provides a visible counter showcasing the number of trees users have contributed to planting.
- Offers a tangible representation of users' environmental impact, motivating continued usage.

Transparent Financial Reports:

- Ecosia publishes monthly financial reports detailing the funds allocated to tree planting and conservation projects.
- Builds trust among users by providing transparency on the allocation of revenue for environmental initiatives.

User Base:

- Ecosia attracts users who prioritize environmentally conscious choices in their online activities, spanning various demographics. While not as massive as some mainstream search engines, Ecosia has a growing user base driven by environmental awareness.

Interaction:

- Search-Driven Engagement: Users engage with the platform through regular online searches, seamlessly integrating environmental impact into everyday activities.
- Community Building: Ecosia fosters a sense of community by showcasing collective tree-planting achievements and encouraging users to participate in a shared goal.

Design:

- Simplicity: Ecosia maintains a straightforward design, emphasizing ease of use and a clean interface.
- Visual Feedback: Visual elements, such as the tree counter, provide immediate feedback, enhancing the user experience.

Business Model:

- Revenue Generation: Ecosia generates revenue through search ad clicks, with a significant portion allocated to tree-planting initiatives.
- Partnerships: Collaborations with environmentally focused organizations contribute to the business model's sustainability.

Advantages:

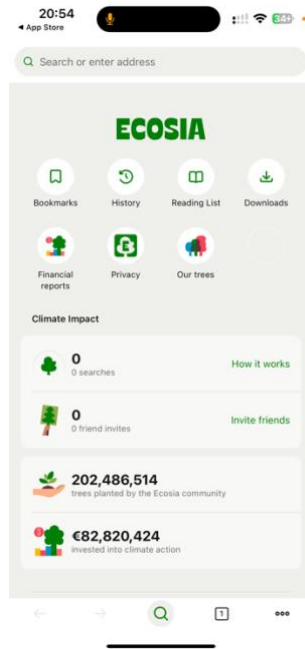
- Direct Environmental Impact: Ecosia enables users to contribute positively to the environment through routine online activities.
- Transparency: Providing financial reports enhances trust, showcasing the platform's commitment to environmental conservation.

Disadvantages:

- Search Engine Market Share: Faces competition from major search engines, potentially limiting its market share.
- Dependency on User Adoption: The success of Ecosia relies on user adoption and regular usage.

Conclusion:

- Ecosia distinguishes itself by offering a unique approach to environmental conservation through its search engine. By integrating tree-planting initiatives with routine online activities, Ecosia appeals to users seeking a simple yet impactful way to contribute to environmental sustainability. The platform's transparency, community engagement, and commitment to its mission are key factors in its success as a competitor in the online search landscape.



Customer Research

Target group: 18-50 years old

Potential customers: younger children and small or medium size enterprise

Customer demand: The public wants to protect the environment easily and with a sense of participation and can also realise the public's mentality of giving love easily.

Customer pain point: want to protect the environment but do not want to pay too much time, energy, and money.

Customer itch (hidden customers): a sense of identity for the protection of the environment and to satisfy their own with a small amount of energy and time to participate in the protection of the environment of the vanity. In addition to the social identity required by all types of businesses, eco-labelling can help them to improve their social identity.

Customer benefits:

Increasing the awareness of protecting the forest, getting reward from eco-behaviour. A sense of accomplishment for helping the forest through small actions.

Customer Analysis:

- **Experienced** : Users aged 16-50 have experience in using electronic devices, so they are more likely to be proficient in using software than users in other age groups.
- **Higher adaptability** : Users aged 16-50 are more likely to accept new things and are more adaptable than users in other age groups.
- **Higher disposable income** : Users aged 16-50 have relatively free income for consumption.

- **Higher growth potential** : Users aged 16-50 have a relatively free and wide social circle, which makes them constantly share their software or daily life, thus attracting more potential customers.
- **Diversity** : A large and diverse customer base will also make the software more popular.

User Personas

(1)Name: Angliss

Age: 35

Occupation: Finance professional

Location: London

Background: Married with two children, undergraduate education, medium monthly income.

Description: Angliss is a Nature lover, and although he participates in environmental activities with his children during the holidays, he still wanted a platform that would help him fulfil his environmental aspirations on a daily basis.

Scenario: "As a worker, I have very little control over my time, but as a father, I would love to have more time to accomplish meaningful things with my children, but mostly we go to play, and I would like to be able to let my children experience the beauty of the environment and at the same time be able to protect it!" Angliss said

(2)Name: Dera

Age: 28

Occupation: Freelance worker

Location: Birmingham

Background: Unmarried, PhD educated, medium monthly income

Description: Dera is an internet celebrity and environmental activist who often shares environmental protection tips and activities on her Instagram. Even though participating in environmental protection is part of her daily life, she feels that she can't really protect the environment just by taking part in the activities, so she wants to have an app that can help her feel more involved in protecting the environment.

Scenario: "As an online celebrity, the most I do is share my daily routine, including participating in environmental activities, but I want to fulfil my desire to protect the environment by going out even less!" Dear said.

Empathy Mapping



Brainstorm

Grovi

"Carbon Coin"

Home Page: • [Jar] to collect coins

- Action Record → Link to Bank App
Add manually
- Guard Dog → Entertainment / Engaging with Friends
game props exchange
- Adopt a tree or 1m² nature reserve *
- Tutorial To get the coins

Community Page: • Direct Donation → Can also gain coins
 • News / Local Event Suggestions

* The most important is the users need to take action in real life instead of online.

[To increase the user's amount]
 The coins collected by user itself can only use for tree or reserve adoption.
 The Jar created with friends can get the coupon or →

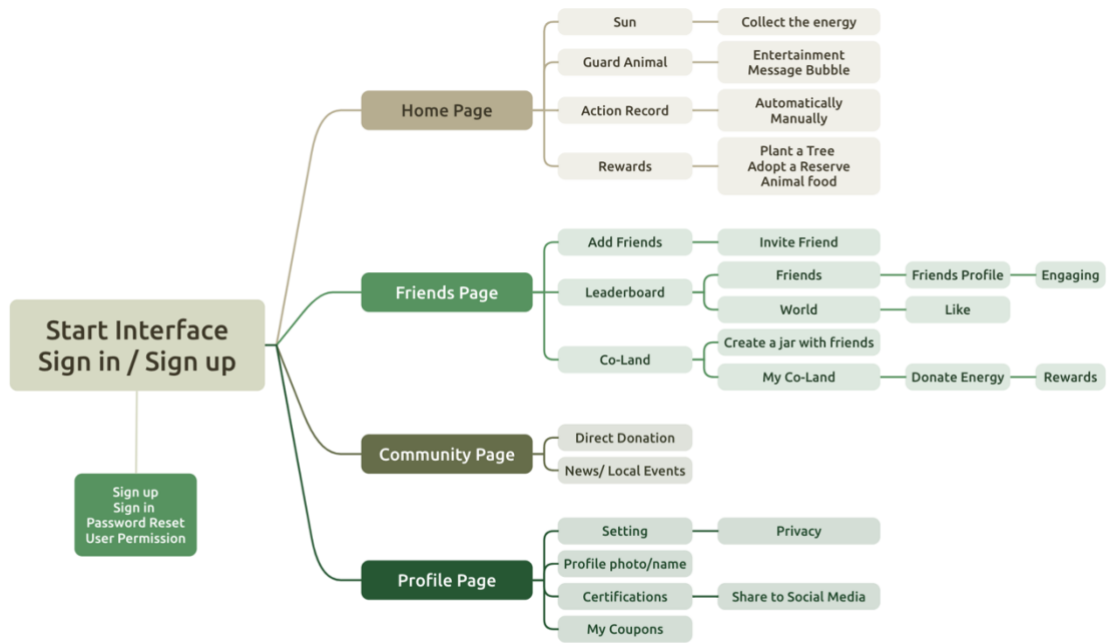
Friends Page: • Create a Jar with ur friend → donate the coin to this Jar → get coupon
 (* 10 coins per day per person)

- Leaderboard [Friends / World]
- Friends' Jar → interact with
 - 1. dog is hungry → help to feed dog → steal coin
 - 2. dog isn't hungry → treat the dog → can't steal
 - 3. remind ur friend to collect coins

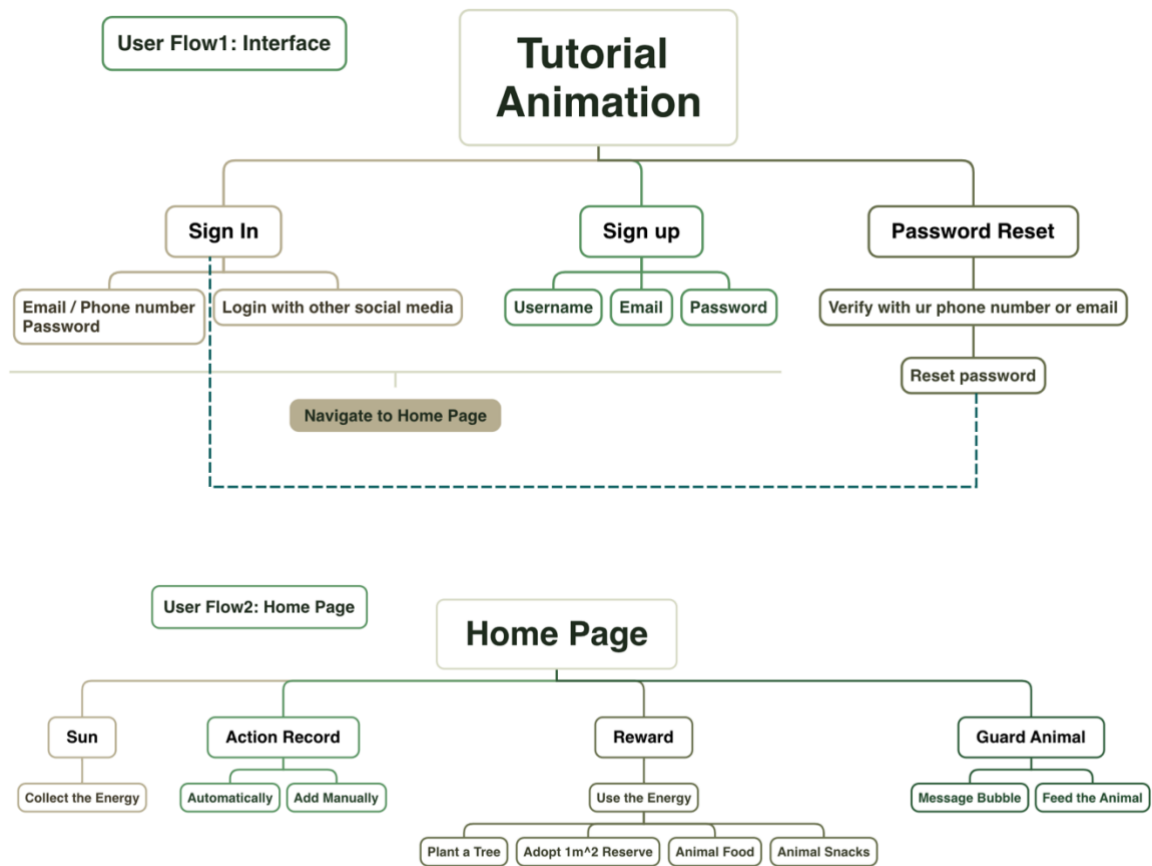
Profile Page: • Profile photo & name

- Setting
- Certification
- Connect

App Architecture



User Flow



3:

