

**Part 1: Evaluation Goals**

1. Evaluate the ease of use and time needed to learn the application's interface for selecting and trading environmentally conscious stocks
2. Verify that the application accurately displays relevant and appropriate information about the environmental impact of different stocks and investment options
3. Test the effectiveness of the application's design and layout for helping users easily find and compare different environmentally conscious investment options

**Part 2: Evaluation Design**

For the evaluation of my Hi-Fi prototype, I will be using a questionnaire. In this case, a questionnaire could be used to gather information about how easy it is for users to learn and use the interface for selecting and trading stocks sustainably, as well as to verify that the application accurately displays relevant information about the environmental impact of different stocks and investment options. Additionally, a questionnaire can be used to test the effectiveness of the application's design and layout in helping users find and compare different environmentally conscious investment options. This is important because the design and layout of the application can significantly impact the user experience and gathering this information through a questionnaire allows researchers to identify areas for improvement and make changes to the prototype accordingly.

**Part 3: Participants**

My representative pool of participants will be made up of my friends and family, specifically those who have a general grasp of how stock trading works and know of the importance of certain environmental practices. However, they will all have varying degrees of knowledge in these fields to assess different types of users. I will send the questionnaire to ten people, and if I get less than six respondents, I will keep sending the questionnaire to others until it reaches at least that amount.

## Part 4: Procedure

Before conducting a user evaluation of a prototype via a questionnaire, it is important to provide clear and concise instructions on how to use the prototype. These instructions should cover the following points:

1. Introduction: Provide a brief overview of the purpose and goals of the prototype, as well as any relevant background information.
2. Objectives: Clearly state the objectives of the evaluation, including what you hope to learn from the questionnaire.
3. Usage instructions: Provide step-by-step instructions on how to use the prototype, including any relevant controls or features. Be sure to cover all relevant aspects of the prototype, including navigation, input, and output.
4. Tips and guidelines: Offer any tips or guidelines that may be helpful for users as they work with the prototype. For example, you might suggest that users try out different features or functions, or that they pay attention to specific elements of the prototype.
5. Timeframe: Let users know how long they should expect to spend using the prototype and completing the questionnaire.
6. Feedback: Encourage users to provide honest and detailed feedback about their experience using the prototype. Let them know that their input is valuable and will be used to improve the prototype.
7. Contact information: Provide your contact information in case users have any questions or need additional assistance.

The questionnaire below will be administered using Google Forms and will not have a face-to-face component due to time constraints and the prior commitments of the users. Instead, the detailed instructions will be able to guide the user on how to operate the prototype and answering the questionnaire.

Most of the analysis of the responses will be descriptive analysis: gathering statistics on how respondents filled out each question to try and see trends in the data. A correlation analysis can be made between some questions, like whether a positive response to the usability of the interface correlates to a positive response in how rewarding the application is to use. Lastly the final question serves as a qualitative analysis to gain direct feedback about how the prototype may have operated in an unintended way.

## Questionnaire Draft:

This is a questionnaire that is meant to evaluate the usability and user experience of the EnvironMarket high-fidelity prototype. EnvironMarket is a tool that allows users to analyze the environmental impacts of their investments. Using an environmental data API when fully functional, the system allows a user to view a company's profile, which includes its financial and environmental information. The financial information is like many stock-trading platforms, showing fluctuations in the stock price, while the environmental information comes in the form of an overall rating, made up of several other sub ratings based on different environmental practices. A user can have a portfolio that shows financial gains across all investments, a cumulative rating for all companies on the portfolio, and the ability to save the contents of the portfolio for further use (via a login).

**Instructions:** When greeted by the landing page, you are told to login by clicking the button on-screen. You are then given the option login via either making a new account (non-functional feature), or by using an existing account. When the existing account button is pressed, you will be given a list of existing users to choose from, however each user leads to the same home page. A user would have different data when fully functional, but it had not been fully implemented.

Once the user confirms their identity with the mock fingerprint scanner, they will be greeted with a home page that holds a lot of information. To better understand the contents of the application, the user can click on the help button to get a general explanation of what each component is meant to represent.

Once logged in, the user can navigate through the Home, Browse, Portfolio, previous pages using the menu at the bottom of the screen. When on the home page, information about a user's account balance, when clicked, can bring them to the portfolio page. Either of the "see all" buttons can be clicked to bring the user to the Browse page, and company tiles can be clicked to visit the Company page (each company has the same page at the moment).

The information displayed on each page is what the application does best. While there may not be a large quantity of functional features, that is not the intention of the application, since it is largely information based.

**Before you begin:** Testing the prototype and answering the questionnaire should take 10-15 minutes total. Spend approximately 5-10 minutes exploring and using the interface, with a short pass through the application at first that only takes a minute or two, and another pass that is more in-depth to familiarize oneself with how to use the prototype. Remember that the prototype is being tested, not you! Do not worry if the application is confusing or does not work as expected, your honest feedback on the prototype will help improve this. Feel free to contact me at the email where the questionnaire was sent from if you have any further questions. Once

you are ready to begin testing the application with the provided link, be aware of when you start so that you spend the appropriate amount of time testing.

**Questions:** Answer question #1-9 on a scale of 1 to 5, where 1 means strongly disagree, 3 means neutral opinion, and 5 means strongly disagree.

1. I found it easy to learn how to use the application's interface for browsing and trading sustainable investment options.
2. It took me a short amount of time to feel comfortable using the application's interface.
3. I was able to easily find the companies or information that I was interested in.
4. The application's design and layout made it easy for me to compare and evaluate different sustainable investment options.
5. The organization of the financial and environmental information was logical and intuitive.
6. The application provided all the information that I needed to make informed investment decisions.
7. The application's design was visually appealing and easy to navigate.
8. Using this application to find sustainable investment options was rewarding.
9. I encountered no technical issues or errors while using the application.
10. If technical issues or errors were encountered, what were they? How did they deviate from the intended function of the application?