Time Garden

JNJ Inc. – Elman – Mahilum – Yosores

Project Description:

Time Garden is a time-management app that lets you plant and grow flowers by not using your phone during a set timer. With a wide array of flowers to plant seeds from, alongside various time requirements- the user could grow their own personal garden from the efforts of not using their phone. With features such as whitelisting apps specifically for productivity, and a storage space for finished plants. Time Garden aims to curb the people's compulsive need to use their cellphones by setting small but realistic goals with tangible rewards of a flourishing garden.

Requirements Summary:

Minimum Requirements	Processor Cores	Dual Core
	OS	Android 6.0 or iOS 9.0
	RAM	2GB
Recommended Requirements	Processor Cores	Quad Core
	OS	Android 8.0 or iOS 11.0
	RAM	4GB
Other Requirements	Permissions	Notifications, Storage

Table 1. System Requirements

The system's requirements are based on those of applications such as BDO Online.

Prototype Description:

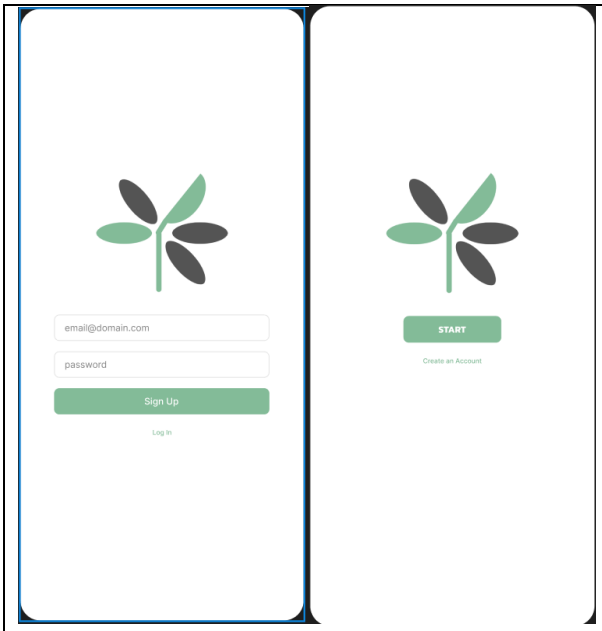
This Time Garden prototype was created in Figma, a collaborative software and website for the ease of creating prototype apps and websites.

Figma Project Link:

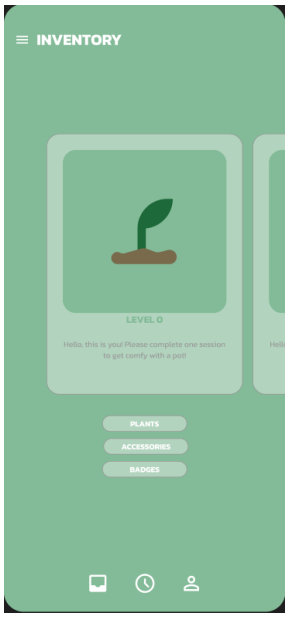
https://www.figma.com/proto/7JSeaJvLF1xCU8jgIlvTJZ/Untitled?node-id=0-1&t=PLdcsRQMkEaH65Qn-1

User Scenario:

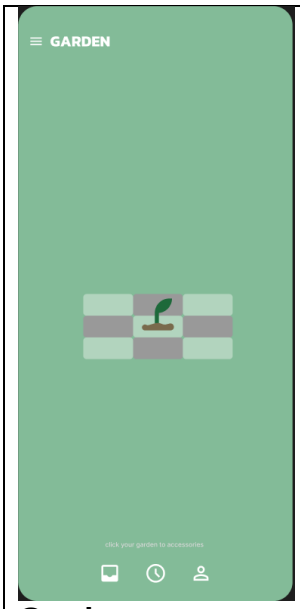
A high school student is finding it hard to focus on her homework and studying for exams as she often gets sidetracked by notifications from social media apps like Instagram and Snapchat. Despite setting goals to study for a certain number of hours each day, she ends up scrolling through her feeds for hours. She discovers Time Garden, an app that could help her reduce her screen time. By earning plants and building a virtual garden, she feels motivated to spend less time on her phone and more time on her studies.



Log In Page
This is the login page of the application. Users can register and/or login with their credentials.



Home Page
This is where the user can start their first few plants and timers.

<table>
<tr>
<td> 

Garden
The Garden is where the user will be able to see plants that are growing, has flourished and those that have withered.</td>
<td> 

Pomodoro Timers
This is where the user will plant their seed timers.</td>
</tr>
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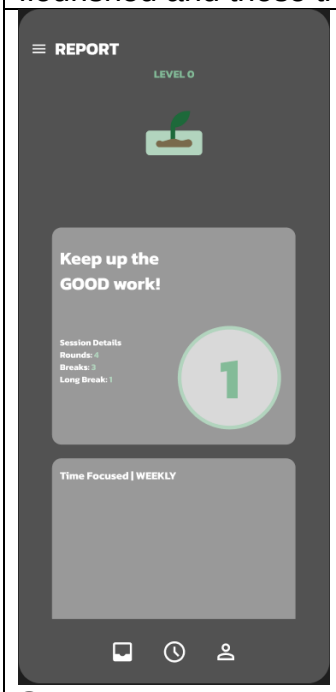
<td> 

Summary Report
This page contains the statistics of all the user’s actions.</td>
<td></td>
</tr>
</table>

Rationale:

The team decided to use Figma due to its ease of use with smooth and stunning results. It also has solid collaborative features that provide the means to give feedback in real time with other designers.

Initial Evaluation Plan:

With the current prototype, JNJ Inc. has decided to focus more on finishing up the remaining UI elements so that the application will be usable for users.

Usability Specifications:

Time Garden wishes to provide the means to reduce distractions with its features, not to become a distraction by itself. With this, these are the criteria that the team will aim for to achieve usability:

- Accessibility: Because of the app's nature, a minimalist design with soft colors should be prioritized, with font size and typeface being carefully considered to reduce eye strain.
- Performance: To avoid unnecessary time spent on the app that could inadvertently cause the user to migrate to other apps from the wait, the performance must be smooth in order to guarrantee as little time is spent on the app.
- Minimal Noise: The app must have very few auxillary features as the purpose of the application is to keep users away from the device for the chosen amount of time. The features must be straightforward and direct, as to avoid distractions in the brief moment the user opens the application to start a timer or check their growing garden.

Roles:

The team aims to get at least 10 participants in conducting the evaluation of Time Garden. The three members of JNJ Inc. Are divided into these three roles:

Developer/UI Designer Manager	**Task**
Jayford Mahilum	will record the duration of user interactions with a task section, document the user's experience, and communicate the task that the participant will perform
Nathan Yosores	will record the duration of user interactions with a task section, document the user's

	experience, and communicate the task that the participant will perform
Jhonna Mae Elman	will record the duration of user interactions with a task section, document the user's experience, and communicate the task that the participant will perform

Time Interpretation for Time Garden

Task	**Highly Acceptable**	**Not Acceptable**
Log In	Within 1 minute or below	Above 30 seconds
Setting Timers/Planting Seeds	Within 3 minutes or below	Above 3 minutes
Checking Garden	Within 3 minutes or below	Above 3 minutes
Checking Summary Report	Within 2 minutes or below	Above 2 minutes

Heuristic Evaluation:

The team's evaluation of Time Garden will utilize the 10 Usability Heuristics method developed by Jakob Nielsen. This approach ensures a comprehensive assessment of the app's usability and user experience.

Visibility of System Status

Time Garden will have a dedicated page for every action the user makes, such as timer setting, seed planting, and overall statistics in various timeframes.

Match Between System and Real World

The application mimics the real-world activity of gardening and time management, which makes terminology such as, "Plant a new seed" and "Set a timer" reflect these familiar concepts.

User Control and Freedom

The user could set a timer anytime they wish or plant their seed anywhere on the board. However, once a user plants a seed and sets its timer, they are not allowed to use their device, except for whitelisted applications, or else their planted seed would wither. This specific mechanism, while restrictive, is ultimately meant to keep the user from using their device.

Consistency and Standards

Time Garden has a very simple function loop that will not change fundamentally, even if the developers add new features. This is to ensure that using their devices would lessen from the application's routine.

Error Prevention

Despite the harsh mechanics of the application, there are still some failsafe features in case of human error such as setting the wrong amount of time on a timer or planting on the wrong location, in which one can cancel immediately without consequence, if ten (10) seconds of the timer has not passed.

Recognition rather than Recall

Time Garden will create objects, actions and options visible and recognizable, so one can speed along common actions with little error.

Flexibility and Efficiency of Use

The app is made to be accessible to new users and constantly interesting to experienced users. There will be a quick menu where advanced users can use to navigate or return to easily, while new users have easy to articulate action paths that encourage familiarity. This approach benefits both groups and all that is in between.

Aesthetic and Minimalist Design

Time Garden especially needs a minimalist design so that the user is not overwhelmed or overstimulated with clutter, which is the opposite of what the app is intended for.

Help Users Recognize, Diagnose, and Recover from Errors

The app will document and readily show exactly what kind of errors the application is experiencing, with very little jargon, to make it easy for the user to troubleshoot their problems.

Help and Documentation

Time Garden will have a short opening tutorial at the start of the application and one can always return to this tutorial if one needs a refresher on certain aspects of the app.

Evaluation and Feedback

Area of Evaluation	5	4	3	2	1
A. **Visibility of System Status**					

- The system design provides appropriate feedback like message prompts in response to user actions. - The message prompts are clear, visible and understandable.	■				
Evaluation The system gives timely feedback.					
B. **Match between the system and the real world** - Used words, phrases and concepts according to users' language rather than system-oriented words and computer jargons.		■			
Evaluation The system uses simple words; however, the context becomes slightly altered.					
C. **User control and freedom** - The system design provides ways of allowing users to easily "get in" and "get out" if they find themselves in unfamiliar parts of the system.		■			
Evaluation One feature of the app directly interferes with this, however, that is by design.					
D. **Consistency and Standards** - The colors, text, labels, buttons and other elements in the design are uniform from start to finish**.**	■				
- Text and icons are not too small or too big.		■			
- Menus and other features of the system are arranged and positioned in a consistent way. (For ex. If your website has navigation buttons on the top under the page title on one page, the users will automatically look there for the same features on other pages.		■			
Evaluation The app is quite uniform in all aspects, except perhaps some slight font size issues.					
E. Error Prevention - The system design provides an automatic detection of errors and preventing them to occur in the first place.			■		
- Idiot proofing mechanisms are applied		■			
Evaluation The system has an error prevention protocol in place, but it is quite basic.					
F. Help users recognize, diagnose and recover from errors **-** Error messages and the terms used are recognizable, familiar and understandable for the users.			■		
Evaluation This evaluation is similar to (E.), as the system is quite lacking beyond the basic.					
G. Recognition rather than recall	■				

- Objects, icons, actions and options are visible for the user. - Objects are labeled well with text and icons that can immediately be spotted by the user and matched with what they want to do.		■			
Evaluation The system was designed to be easy to use.					
H. Flexibility and efficiency of use - The system design provides easy to navigate menus.	■				
- the system does not make wasteful time of system resources.			■		
Evaluation The side menu makes it efficient to navigate.					
I. **Aesthetic and minimalist design** -Graphics and animations used are not difficult to look at and do not clutter (mess) up the screen.	■				
- Information provided is relevant and needed for the system design.		■			
Evaluation The system has a very pleasing and gentle designs, true to the colors of a growing plant.					
J. **Help and Documentation** -the system design provides information that can be easily searched and provides help in a set of concrete steps that can easily be followed.	■				
Evaluation The system is easy to understand.					

Design Implications:

Does your prototype need to be altered to address the results of the analysis, or was it completely successful?

This Time Garden prototype is workable and showcases what features and flow of design the product would have. It is also acceptable according to the heuristic evaluation, however, there are certainly some aspects that could be done better.

Mainly in error prevention feedback, while we added a basic and working protocol for error detection, accurate reports and feedback has not been added and could be detrimental in app effectiveness as users would need to take extra steps to fix issues that might crop up. By making a more detailed system specifically for error detection and prevention, we could mitigate the issues by giving the user more detailed reports and better knowledge on how to fix certain problems.

What improvements could be made to the design to address any shortcomings?

- Detailed Error Reports: Give users error reports, with minimal technical jargon, but more detail as to give users more information on the error's nature.
- Bug Reports: To ensure users inform the developers of any app breaking issue.

Critique and Summary:

What were the advantages and disadvantages of your evaluation?

Advantages:

- Thorough Assessment: Using Nielsen's Usability Heuristics gave us a well-rounded and informative evaluation of this system's prototype.
- Identified Key Areas for Improvement: This evaluation assisted in spotlighting specific areas where improvement is most needed.

Disadvantages:

- Limited User Feedback: This evaluation was conducted by the developers, which would limit real user actions and insights.
- Scope of Evaluation: Some aspects, such as overall efficiency and long-term interest are not able to be evaluated.

What would you have done differently knowing what you know now (both design-wise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).

JNJ Inc. would have focused on creating a comprehensive evaluation and review with a diverse set of people to receive feedback that would be more useful for new iterations of the prototype. With this quality feedback, the developers could refine existing features that enhance its effectiveness or create new features that cater to the needs of more users while keeping the core of the application. Of course, the evaluation itself must evolve to encompass more aspects of the system, as the current criteria and scope was simply too narrow for plans of a public release. Consideration of system aspects such as performance efficiency, offline and online feature bridging, and progress being saved on a cloud.

By keeping these aspects in mind, Time Garden would grow and improve to cater to the needs of the population that needs a simple way to manage their time spent on their phone.

Summary of the Project:

Time Garden is a time management tool designed to keep its user away from their device to promote self-control and scheduling. The app achieves this by making its timers little plants that flourish if the user successfully manages to avoid their device in the allotted time, or wither when the user fails otherwise. The user can then see their garden full of their plants, whether they live or withered. The app also tracks the user's overall statistics in the summary report page, where one can see how much time the user has successfully accumulated, their longest uninterrupted streak and the number of plants they have, all arranged by either day, week or month.

Time Garden is not without its faults, however, as multiple evaluations and fundamental design reworks for different features are in need. One of these includes an advanced error handling protocol that can accurately detect issues that might crop up during app usage. Long-term usability research, real-world scenario testing, and a larger participation base will all be part of the evaluation process. All of these, in the end, ensure that the system could be used by those that need self-discipline that can be fun, rewarding and relaxing.