

Mooonster

Group: Flowery Stones

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Introduction

As Yau, N (2009) indicates in Beautiful Data, the tide of the Web is turning from data distribution toward the individual. Applications and websites mushroom every day, allowing people to track their daily routines and to analyze their pattern, in order to gain a better understanding of themselves and their surroundings. Based on personal experience and observation, individuals are found unproductive and difficult to focus on big picture projects if they cannot manage to break the big goal into actionable tasks. To hack and make work smarter, our website tends to provide users with a playful, flexible time-management tool, allows them to manage projects and review workflows by collected data. This helps users to form a good habit so they can work efficiently. Technically, our website exploits Pomodoro technique aligned with Getting Things Done (GTD), which are two of the most efficient time-management methods in the world.

- Pomodoro:

The Pomodoro technique uses a timer to break work into intervals 25 minutes in lengths, separated by short breaks(usually 3-5 minutes). Before starting a 25-min pomodoro, users are supposed to decide on the to-do task at first; and after four pomodoro, users can take a longer break(traditionally 15-30 minutes).

- Getting Things Done:

The concept of GTD methods is that individuals are allowed to record planned tasks and projects externally and then break them into easy-to-accomplish steps instead of recalling them, so that individuals can focus on current tasks.

As gaming context is found to improve the perceived ease of use of information system, we gamify the website to improve user engagement. Users are set as a player, who are supposed to feel interested and entertained to get all things done with ease when engaging in the website.

Existing Time-management Tools

Many web-based time-management applications and services exist that try to improve productivity and creativity. We will introduce two types of websites: Trello and Workflowy.

- Trello is a project management application which consists boards, lists and cards. Projects are represented by boards, which contain lists(task lists). Lists contain cards(tasks). Task lists can be set as “to do”, “doing”, and “have done”, and cards on each list can be drag and drop from one list to the next when progressing. As users can be assigned to cards, trello is applied to organize group works.
- Workflowy is a light project management application, which helps users to manage projects logically. The interface is as simple as a white paper. Users are allowed to create projects and break them down into as many steps as they want. From a project and its subordinate tasks, users can see the big picture of projects as well as the minute details clearly and know their top priority.

Concept

Rest on the ideas of Pomodoro and GTD, our website aims to help users to break a big project down into small actionable tasks, so as to allow them to focus attention on tracking action on tasks, instead of on recalling them. In that respect, the design of our website is similar to the design of games, which will allow players to achieve small wins that keep them playing. Given this, we are trying to gamify the website, with the intent of engaging with the youth who want to improve creativity and productivity and those who are easily distracted.

Empathy

Using an empathy-based approach, we address users as players and allow them to enter a playful context: the process of adopting a monster and feeding it uses as the metaphor for the process of finishing a project. Projects are represented by big monsters, which are adhered to little monsters (corresponding to small tasks). Users are responsible for feeding monsters with pizzas. The process of feeding pizza is a metaphor for time spent on a specific task, every pizza represents interval 30 minutes in lengths. Fed with a given number of pizzas, users can click "I am full" button on small monster's card board and then there will be a crown on its head which means a small task has been done. On the other hand, users can quit the current eating behavior by clicking "dropping" to stop time-counting. The big monster will feel satisfied — their face and body shape will change. Consequently, users can get an emotional attachment to the monsters.

The desire of earning reward

The essential hook of a game might be earning reward and leaping over obstacles. Based on the idea, once the user achieves a small accomplishment, they will be get a reward badge. For example, a speed badge will appear if the user can finish every project within 20 days averagely; an early bird badge or night owl badge will appear respectively if the user is more efficient in the morning or at night.

The increasing number of badges can bring users the sense of accomplishment, which encourage them to spend more time on working and increase engagement with our website. Moreover, as our target audience is the youth, they are more likely to compare the number of badges they have got with each other. Thus the desire of beating the high score (even if the user is trying to beat his own record) can drive them to work harder.

Representation of Data

In order to help users analyze patterns of their workflow and increase the efficiency, we provide users with history review. However, not everyone is of interest in sifting through massive data, and not everyone has the ability to deal with large data sets. To address this, rather than presenting users raw data that needs personal interpretation, we offer a very personalized, and immediate way to comprehend the workflow. Since intrinsic motivation comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working a task, from the accumulated working hours and finished tasks, users can get inspired to form a better working habit driven by intrinsic motivation. At this stage, we also have collected the data of users behavior history, for example, the time of beginning and finishing a task, users' attempting to quit feeding, therefore users will be noticed if they always leave hard tasks at last; when is the most productive time can tell from the history record, etc...

User Experience

1. Login page

We have re-design the login page in two aspects: Adding a user guidance and altering the way of sign in.

-User Guide: As we use metaphors for the project and process of working, which is found abstract to new users, we decide to illustrate our concept by telling a story and show a guidance tour. New users are supposed to follow our instructions step by step so they will know some hidden functions. Further, a few supplementary sentences will be presented to a new user before they login so that they can understand our ideas and functions.

-Login way: In version alpha, users were supposed to input their phone number to login, which was not safe for users' information. We change to identify users with their user name and password this time.

2. Main page

In this page, we have developed more functional features: history record review, finished projects and reward badges. At the first stage, users can only create new projects. All projects that users create will be shown as monsters' houses on main page. Users are supposed to click the "+" to add new project (corresponding to adopting a new big monster), and they are requested to name the project and give it a simple description.

- Trackable history record:

Users' behavior are quantized and visualized: once users move their mouse on the right edge of the webpage, an infographic will slide out. Hover mouse on the icons, the number of project/task finished and total working hour are supposed to displayed as they represent the accomplishment of users; while the times of user quitting tasks are supposed to shown as a reminder to tell user to hold on to the end. A diagram with changeable scales("show as weekdays" and "show as hours") will show the number of consumed pizzas in each weekdays and every two hours, on which users can know when is the peak time for studying or working. Besides, users can input a specific number to check the history record within setting days.

- Reward badges:

On the top right corner, users can easily see a list of badges they have got, including the reward for spending much time on working and finishing a specific number of tasks/projects productively. Hover the mouse over these badges, the explanation of each badge will be displayed.

- Finished Projects:

Our website allows users to see the amount of projects they have finished through the main page. Monsters will be displayed in the bottom strip with different appearance and combinations to tell users their achievements.

3. Monster home page (Project/task creation, start, edition, deletion, and finish)

This page exhibits the images of a big project and its subordinate tasks. At the first stage, we have completed the function of task creation. In the beta version, functions such as starting task, project/task edition, deletion and finish has been added and refined. In order to keep the interface clean, these three functions, shown as pen, pizza, and cross icons, will not be displayed until mouse hover over the image of monster.

If the pen icon is clicked, the little monster's info card will appear, on which users can edit the information of the task and see the amount of eaten pizza as well. The amount of eaten pizzas reflects that how much time an individual has spend on this task. Feedback also will be given if tasks/projects are finished so as to make users in control or bring them the sense of accomplishment.

Hindsight

With hindsight, our website should have been improved in the following dimensions.

1. Design

We tried to make a clean and nice website, but there are some problem with the layout design: design style in different interfaces are not consistent; the layout feels wrong; lack of click hint. To be specific, although we have tell users how to go back to homepage and how to make history records display in user guide, we should have given users a clue, such as a little triangle or array, to tell them where to hover their mouse and where to click. Furthermore, as we fail to make responsive web design, the appearance of the web looks different on screens with different sizes and resolutions. The reason for this is that we did not have much experience on building a website, and we used pixel to position div in almost all pages so we did not have enough time to fix all pages.

2. Unfinished function

- Customized date notification: We tended to build date notification function into our website. Users are supposed to set the due date so they can be told the coming deadline. The notification can be presented as a popping-out bubbles or a monster with changed color, so that they can know the priority of projects. The notification function can also be customized as user's setting in the future, e.g. when to be reminded ahead of time, and the reminder frequency.
- Group work: Our website can be used as a group work tool. For instance, users can share a common project with their group members, assign tasks to each person and feed monsters together.

- Mobile phone application: An application might be developed in the future so that users can use this time management tool anywhere and anytime. More data can be collected (e.g. GPS information) and tell users where is the best place to focus.

- Social function: the link of our website and users' accomplishment can be shared in social media website like Twitter and Facebook. This can increase the visibility and user engagement as users are likely to compare peers with the number of reward badges.

3. Organization

we did not well organized —we have wasted a lot of time to amend the errors, which is unnecessarily. We should have finished the graphic design prior to beginning the front end, so that we can avoid inconsistent design style and disagreement on the user interface.

4. Detail

There is something wrong with the summer time in back end: an hour later than the British Summer Time.

Roles of team member

Graphic Design: Zimei Du

Front End Design: Lingwei Wu

Back End Build: Yingnan Chen

Reference

Allen, D.(2002). *Getting Things Done: The Art of Stress-Free Productivity*. Penguin. p267.

Colborne, G. (2011). Simple and usable : web, mobile, and interaction design. Berkeley, Calif. : New Riders, [2011], ©2011.

Trello. <https://trello.com>

Workflowy. <https://workflowy.com>

Yau, N. (2009). *Beautiful Data: See Your Life in Data*. In: Toby Segaran& Jeff Hammerbacher. O'Reilly Media. p280.

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