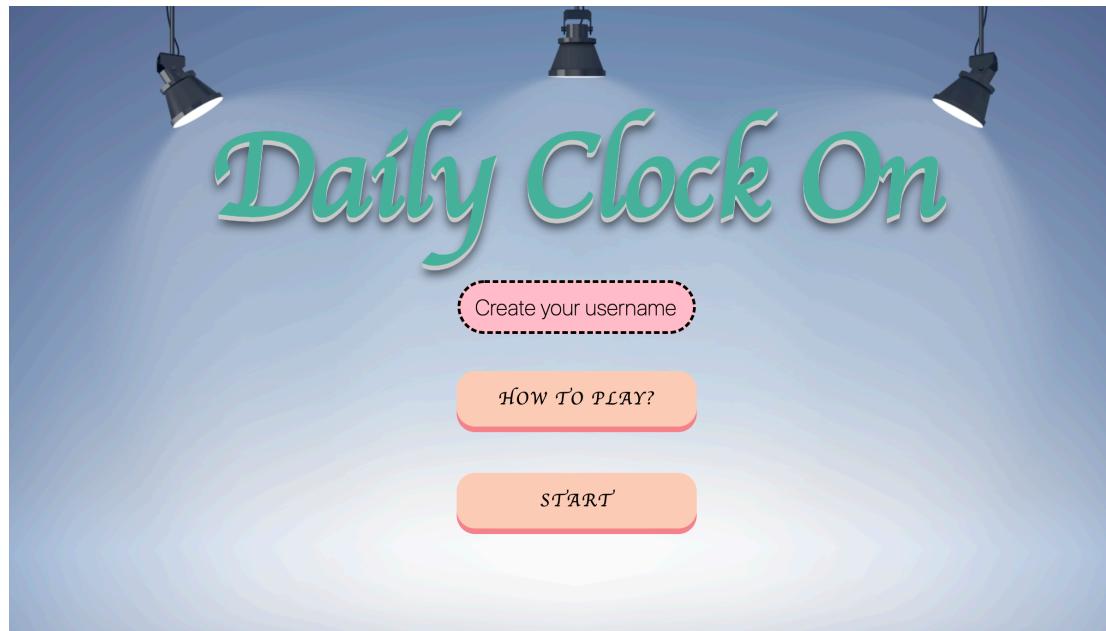


Final project design document

Description

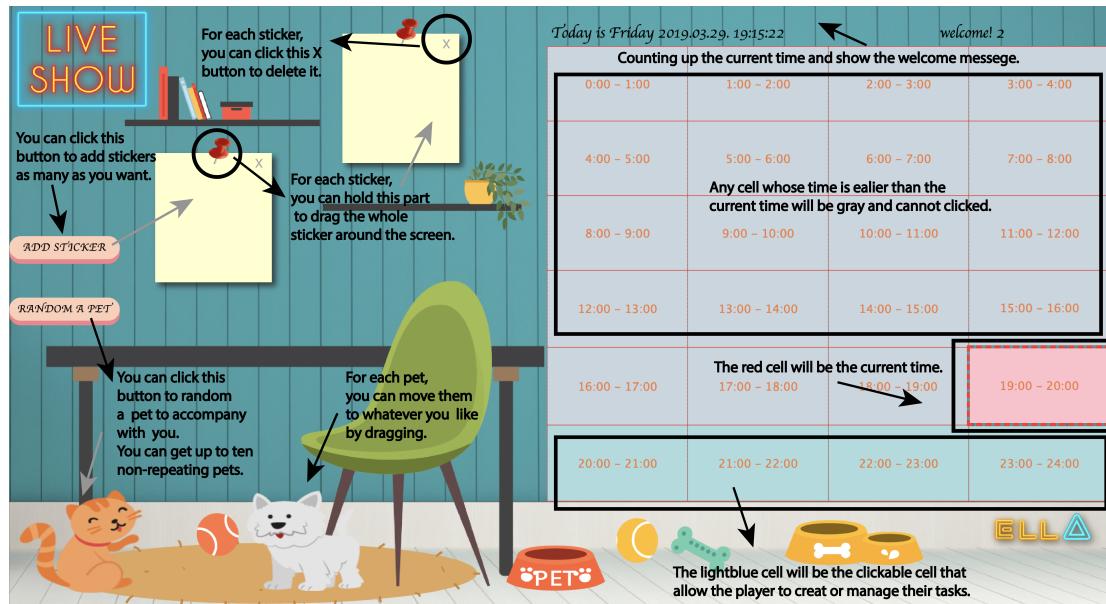
“Daily Click On” Application

This is a memo application. In this application, I supply two main features: record notes on the stickers and build personal schedule at the calendar.



(Homepage)

After the user create a name and click the “start” button on the homepage, he will see these two features in the main page which is divided into two parts as shown below.



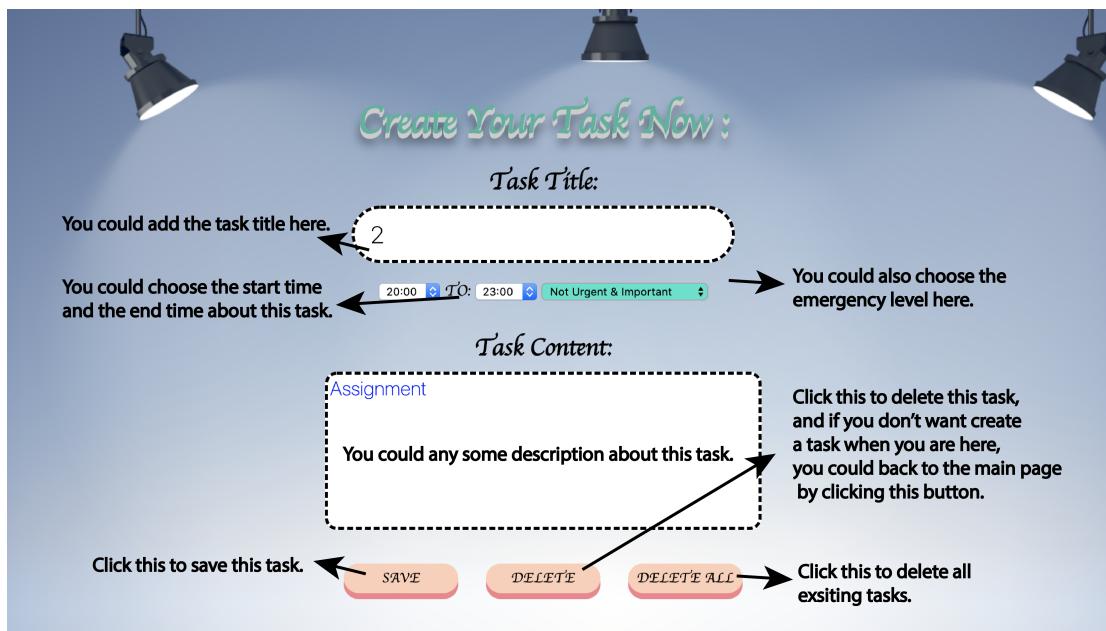
(The main page)

In the left part, the players can record their personal notes by creating stickers and they also can random some pets to accompany with them.

The “add sticker” button: When the player clicks the “add sticker” button, a yellow sticker will appear on the interface. The player could drag the red thumbtack to drag the whole sticker. In every sticker, the players could record as many information as they want, and the players could check their information by scrolling the sticker.

The “random a pet” button: When the player clicks the “random a pet” button, a random pet will appear on the left bottom of the interface. For each pet, the players could drag them wherever they want. In this part, the player could get up to ten non-repeating pets. There will be a reminder that if the players get an exist pet by clicking or they have already got the ten pets.

In the right part, there is a time table showing all 24 hours today. If the table cell which owns the time earlier than the current time, it will be gray and cannot clicked. The pink cell shows the current time the play opens the page. The light blue cells are the cells the players could click and go to the task page to create or edit their schedules.

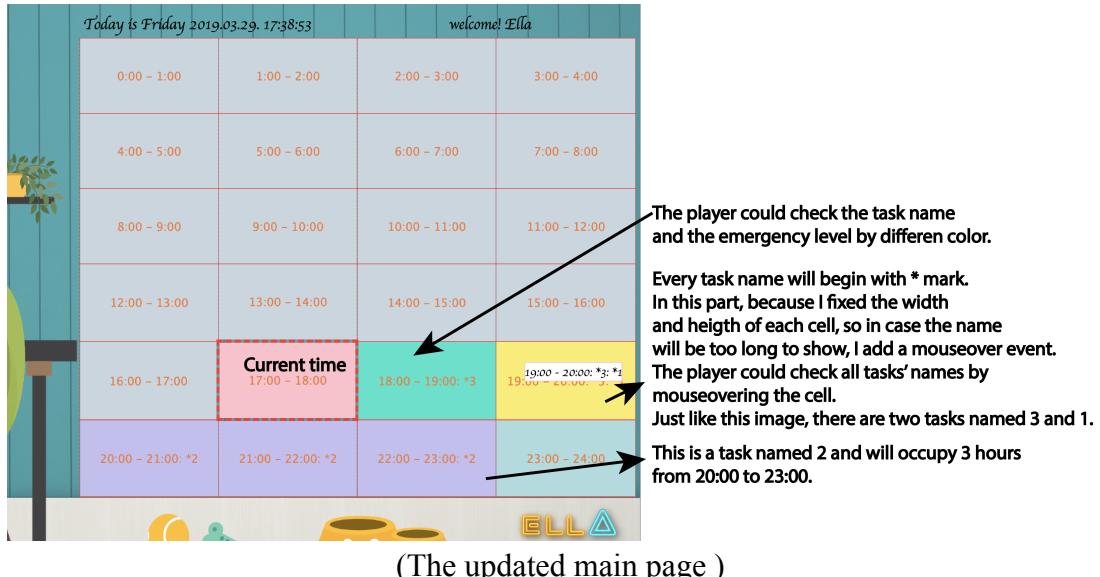


(Task page)

In the task page, the player could add the task title, the start time, the end time, the emergency level about this task, and the description. Click “save” to create a new task or restore your change. Click the “delete” to delete the task or just back to the main page. Click the “delete all” to delete all tasks.

About the start time and the end time: When the player enters the task page, the start time will be shown as the cell the player clicked. But the player also could choose a larger range about the task. The range of the start time will from the current time to 24, and the range of the end time will be changed depends on the start time the player chosen. For example, if the player chooses 7:00 as the start time, the end time will default selected as the 8:00, and the range of the end time will from 8:00 to 24:00. I design the whole time selection part like this because I don’t want the player selects a larger end time than a start time.

Moreover, after the players finished creating or editing their tasks, they will back to the main page again. **The main page will update** all task information according to the task changes from local storage.



Research

About the sticker, I have searched something about the draggable method from JQuery UI, and how to drag and move an object without JQuery UI.

About the table, I have searched some CSS code about the table like how to show hover effect, how to edit different borders, how to fixed the table cells, and how to hide the too long text information in every table cell, and how to show a div when mouseover.

About the select box, I have searched shown features like how to get time form the select box, and how to show different color according to different options in a select box.

About the localStorage, I do few researches like how to set an object to localStorage, how to get it from JSON, how to run loop every items from the localStorage by looping keys.

About the alert box, I have searched some similar alert libraries and their guidance.

Breakdown Problem

1.launch the homepage

add background image in CSS file.

show the title, the username input, the “how to play” and the “start” buttons.

Store the username in a global variable for welcome message using.

Add a Click event to “how to play” button :Show an sweetalert box to show the introduction information when click the “how to play” button.

Add a Click event to “start” button: if the player inputs a username then turn to the main page, and if not, show an sweetalert box to reminder the player.

2. The sticker

Create a div in html.

Create a Sticker object.

Add close button, the red thumbtack img, the textarea to this empty div.

Add CSS code about these elements.

Add click event to the close button.

Add mousedown, mousemove, and mouseup events to the red thumbtack img.

3. Random the pets

Add all pets' image in an array.

Add click event to the button.

Get a random number from 0-9.

Store all random number to an array.

Show the reminder if gets an exist random num.

Show the reminder if gets all ten pets.

4.The time table

Create a 4*6 table.

For each cell, show the hour number from 0-24.

For the cell equal with the current time, show a unique CSS style.

For cells which earlier than the current time, show gray and no click event.

For cells which later than the current time, show light blue and add click event.

In the click event, check if there is task in localStorage.

If the localStorage is not empty, loop it.

For each object from localStorage, compare the start time and the end time of the object with the cell's id (stored the hour number about the cell). If the cell just at the period of the object's time range, show the name in the text of the cell. If not, just show the hour number. Add mouseover and mouseout events to these cell.

5.click an available cell to turn to task page

Get the current hour number in this cell.

Empty all data of all elements in task page.(title, select box, content)

Check the localStorage.

If localStorage is empty, just create a clear task page with no data (clear all title and content data and shown the default time and color select box).

If localStorage is not empty, compare the key (stored as starttime:keytime format) and the current hour number, if match, that means in this time, there are some tasks, so just show the first task start with the start time. If not match, that means, even though there are some tasks stored in the localStorage, there is not relative to this time, so just show a clear task page.

6. show time when clicked a cell

Clear all append data in select boxes.

Set the option range: for the start time, show the range from the current hour to 24, but show the clicked cell number(the clicked hour number) as the selected state. For the end time select box, show the range from the start time +1 to 24.

Set the default selected time both the start time select box and the end select box.

Add change even to start time, if the player choose the option from the start time select box, then change the end time rang from the selected time from the start time selected box to 24.

7. save task

Add click even to save button.

If the task title is empty, give an alert to remind the player.

If the task title is not empty, turn to the main page.

When turning to the main page, store the data to localStorage.

Update the time table in the main page. (call the same function in 4).

8. delete task

Get the start time and end time from the two selected boxes.

Find the key stored in the localStorage.

Remove this item from localStorage.

Turn to main page.

Update the time table.

9 deleted all tasks

Clear all data in localStorage.

Turn to main page.

Update the time table.

Schedule of Milestones

Week 9: (March 8)

The basic interface design and the function design.

The background images.

Week 10: (March 15)

The main page part and the task page part.

Implement all main function the time table.

Create the basic CSS style about these two pages.

Week 11: (March 22)

The sticker part.

The dragging problem.

Alpha test: Present the main page part and the task page part in class

Get feedback from Professor, TA, and classmates.

Week 12: (March 29)

Add localStorage part to code.

Change the update table method, and the save data method.

Adding more features about the task page like the select box.

Add the homepage.

Design document.

Change the CSS code to meet to the lab's screen.

Reference

SweetAlert Library: <https://sweetalert.js.org/>

JQuery Library:<https://jqueryui.com/>

JQuery Library: <https://jquery.com/>

Draggable method: <https://jqueryui.com/draggable/>

Drag a item without draggable: <https://www.kirupa.com/html5/drag.htm>

How to get time in select box: <https://stackoverflow.com/questions/45389579/how-to-get-time-in-select-box-with-half-hour-interval-in-jquery>

Change the text color of selected option:

<https://stackoverflow.com/questions/15755770/change-text-color-of-selected-option-in-a-select-box>

How to fix a table cell: <https://blog.csdn.net/w5688414/article/details/78066883>

How to show a div when mouse over:

<https://blog.csdn.net/lotusyangjun/article/details/46377253>