

Place Keeper

ES6 & HTML5



General

Our app consists of three HTML pages:

- **index.html** the App's home page with navigation links to the two other pages.
- user-prefs.html displays a <form> for collecting user preferences. These preferences determine how various parts of the app are displayed.
- map.html displays a list of places saved by the user and a map.

Guidelines

Remember to use the <section, nav, main, aside, header, footer> semantic elements

Use ES6 throughout your code: destructering, arrow functions, default parameter values, let, const, etc.

Use the MVC pattern to shape your app, you should have the following services:

- utilService general utility functions.
- userService manages saving and reading the user's preferences
- placeService manages the place entity CRUDL

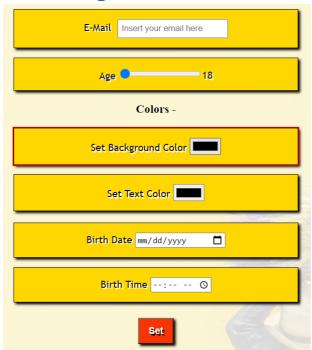
index.html

This is a simple home page with some graphics and a welcome message, something like: Find your way back to your best places

Add navigation links to the other (two) pages: user-settings.html and places.html



user-settings.html



Here we will use a <form> to get the user settings and save them to localStorage.

The **user** object will finally look like that (but its better to start simple with the first two properties — email and txtColor)

```
const user = {
    email : '',
    txtColor : '',
    bgColor : '',
    birthDate: '',
    birthTime: ''
}
```

The application should use the colors provided by the user and show the homepage (index.html) accordingly.

Step 1 - Colors

Use HTML5 color <input> to let the user set its background and text color of the pages.

TIP: use: userService.save(userData)



Step 2 - Date and Time

Use HTML5 *date* and *time* <input>s to let the user set his exact birth time, In the homepage render the user's birthtime

Step 3 - Wrap in a form

Put those inputs in a <form>, and on submit, use a service to keep them in a localstorage object: userData

TIP: you will need event.preventDefault in the onsubmit event handler.

Step 4 - Add some more inputs

- 1. Add a required email <input>
- 2. Add a range <input> to let the user select his age: 18->120

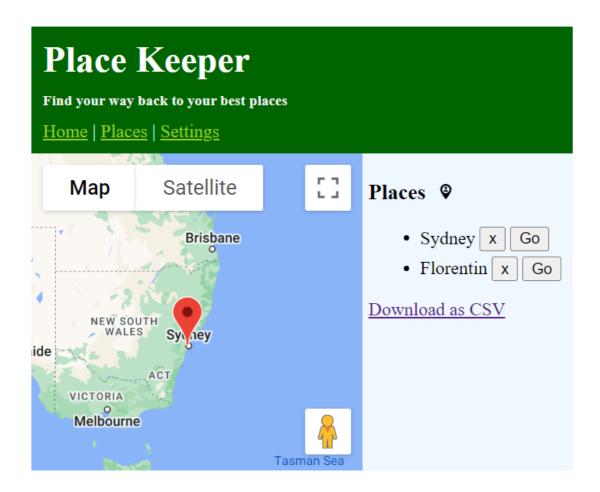
places.html

Here we will show a **map** and allow the user to manage his places.

Tips:

- Use the 'create Google Api' doc to create an API key and secure it.
- This ex involves self learning and handling new documentation that we haven't met yet.
- Self learning new technologies is a big part of being a pro programmer!







Step 1 - places list

Show the list and allow the user to remove a place.

Use a placeService that manages the place entity, a place object looks like that:

```
{id: '1p2', lat: 32.1416, lng: 34.831213, name: 'Pukis house'}
```

- Start from rendering 2 places on the page
- Setup your place.controller
 - function onInit() {}
 - function renderPlaces() {}
 - function onRemovePlace(placeId) {}
- Setup the place.service

```
function getPlaces() {}
```

- function removePlace(placeId) {}
- function addPlace(name, lat, lng, zoom) {}
- function getPlaceById(placeId) {}
- function _createPlace(name, lat, lng, zoom) {}
- function _createPlaces() {}
- o Render the list and check that your functions work

Step 2 - Show a map

- 1. Generate your Google Maps API key
- 2. Show a map centered at Eilat
 - Copy the code needed for showing a simple map
 - o you can use an online tool (<u>such as this</u>) for getting the lat-lng for Eilat
- 3. When a user clicks on the map, the user is prompted to enter a name and a new place is saved to storage, here is some code to put you in the right direction:

```
gMap.addListener('click', ev => {
    const name = prompt('Place name?', 'Place 1')
    const lat = ev.latLng.lat()
    const lng = ev.latLng.lng()
    addPlace(name, lat, lng, gMap.getZoom())
    renderPlaces()
})
```

4. When a user clicks a button to go to a place, the map is moved and zoomed on the selected place

```
function onPanToPlace(placeId) {
   const place = getPlaceById(placeId)
   gMap.setCenter({ lat: place.lat, lng: place.lng})
   gMap.setZoom(place.zoom)
}
```



Step 3 - User location

when user clicks the button, get his current location and center the map accordingly.

Step 4 - Markers

When the map is ready, and also when places are added / removed, we call the renderMarkers function:

```
function renderMarkers() {
   const places = getPlaces()
   // remove previous markers
   gMarkers.forEach(marker => marker.setMap(null))
   // every place is creating a marker
   gMarkers = places.map(place => {
      return new google.maps.Marker({
        position: place,
        map: gMap,
        title: place.name
      })
   })
}
```

Step 5 - Finalize the app

- 1. Add navigation links to all pages.
- 2. Let the user download a CSV of the places

Bonuses

- 1. Replace the prompt for new place name with a nice modal
- 2. In the user-settings.html
 - add another input: gender, that is based on a datalist with the options: Male, Female, Other
 - Add custom validation: validate the provided user age matches the provided birth year
- 3. Create more pages and try out some HTML5 features we have covered