

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: destructuring, arrow functions, default parameter values, `let`, `const`, etc.

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

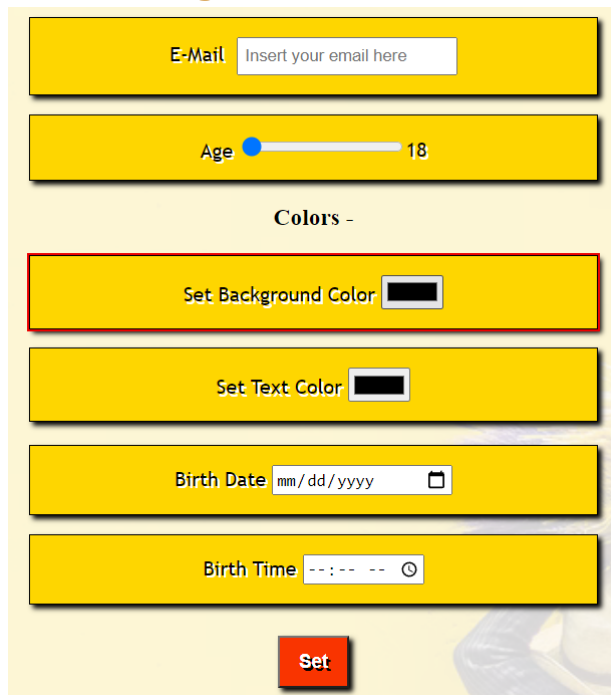
- `utilService` – *general utility functions.*
- `userService` – *manages saving and reading the user's preferences*
- `placeService` – *manages the place entity CRUDL*

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

A user settings form with a yellow background. It contains several input fields: an email field with placeholder text 'Insert your email here', an age slider set to 18, a section titled 'Colors -' with two color pickers for 'Set Background Color' and 'Set Text Color', a birth date field with a date picker, and a birth time field with a time picker. A red 'Set' button is at the bottom.

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

The **user** object will finally look like that

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

* Master tip: it's best to **start simple** with the first two properties – `email` and `txtColor`

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

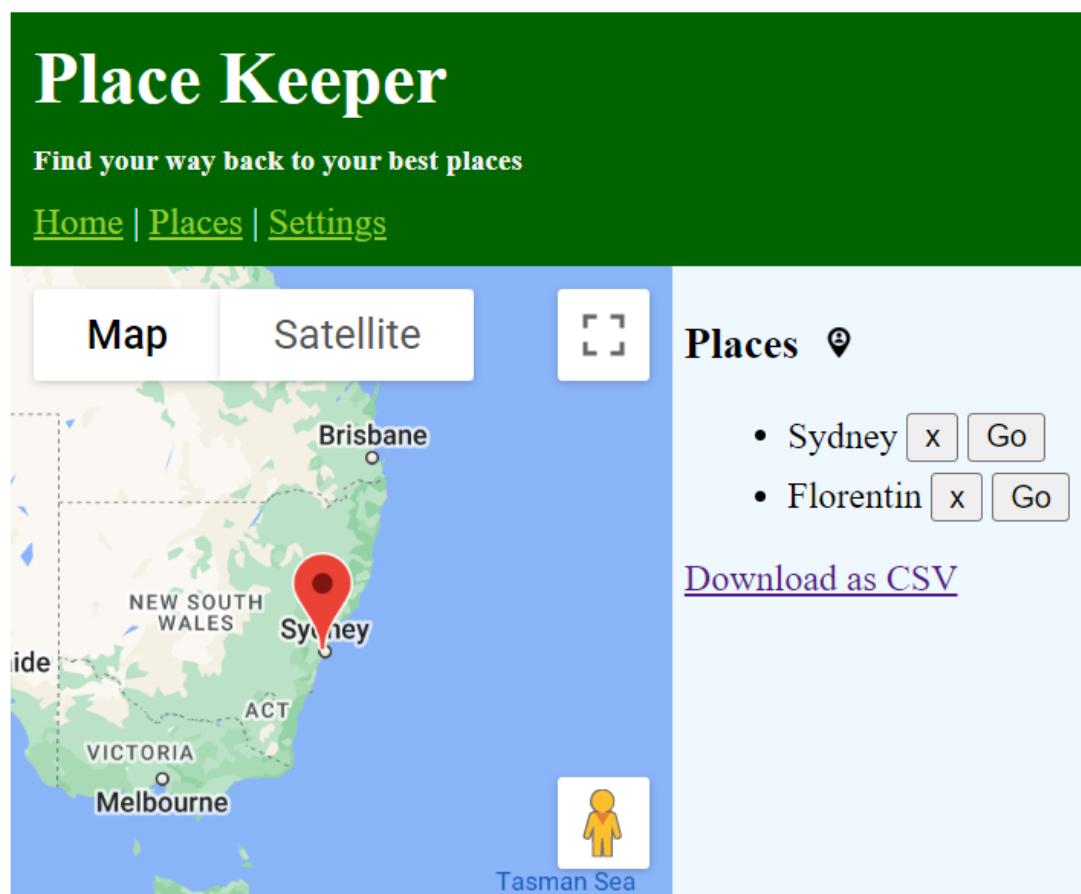
1. Add a *required* email `<input>`
2. Add a *range* `<input>` to let the user select his age: 18->120

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 exercise involves self learning and reading documentation for a new API



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() {}`
- Render the list and check that your functions work

Step 2 – Show a map


1. Generate your Google Maps API key
(see directions in a separate doc)
2. Show a map centered at **Eilat**
 - Copy the code needed for showing a simple map
 - you can use an online tool ([such as this](#)) 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