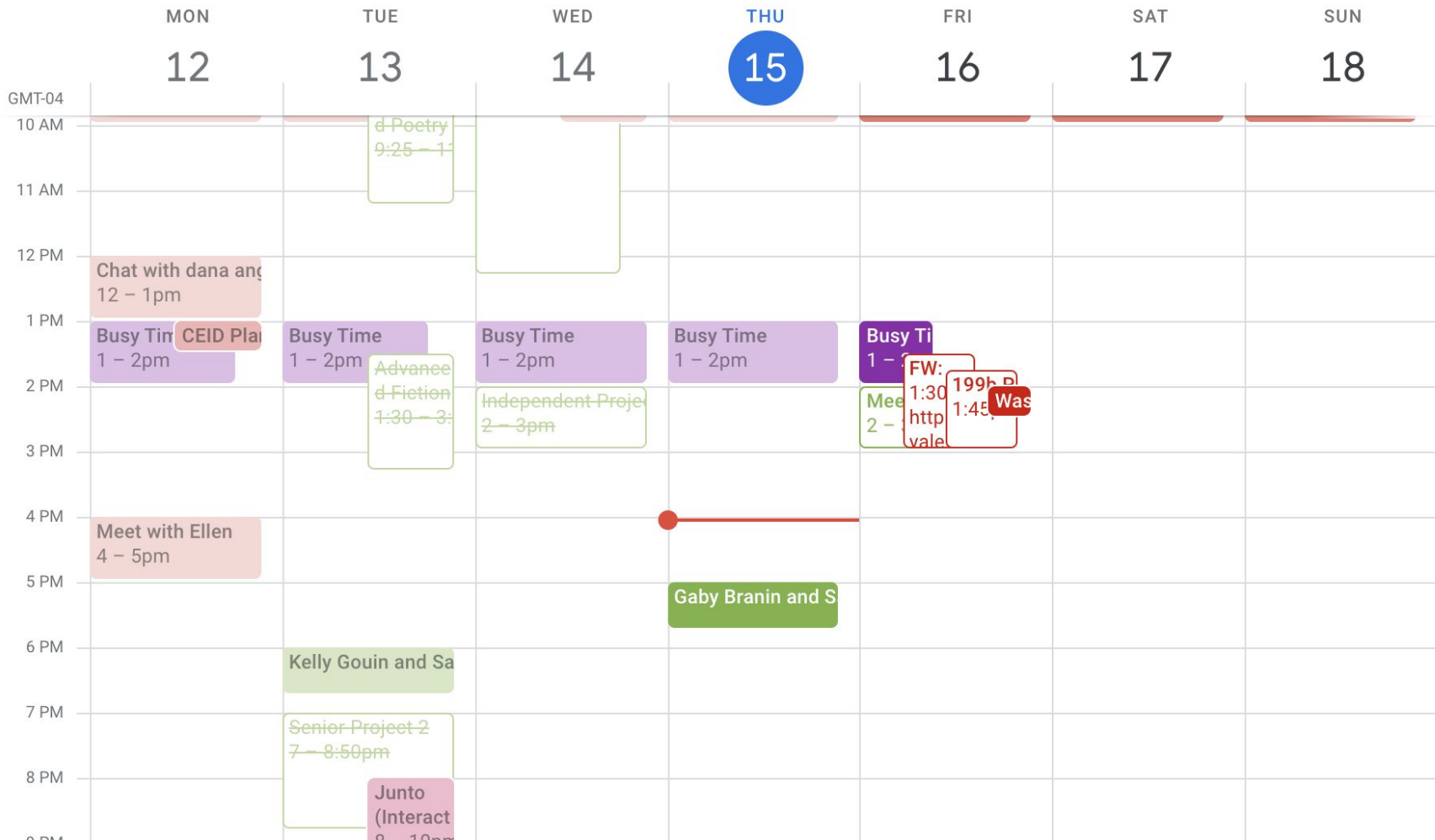
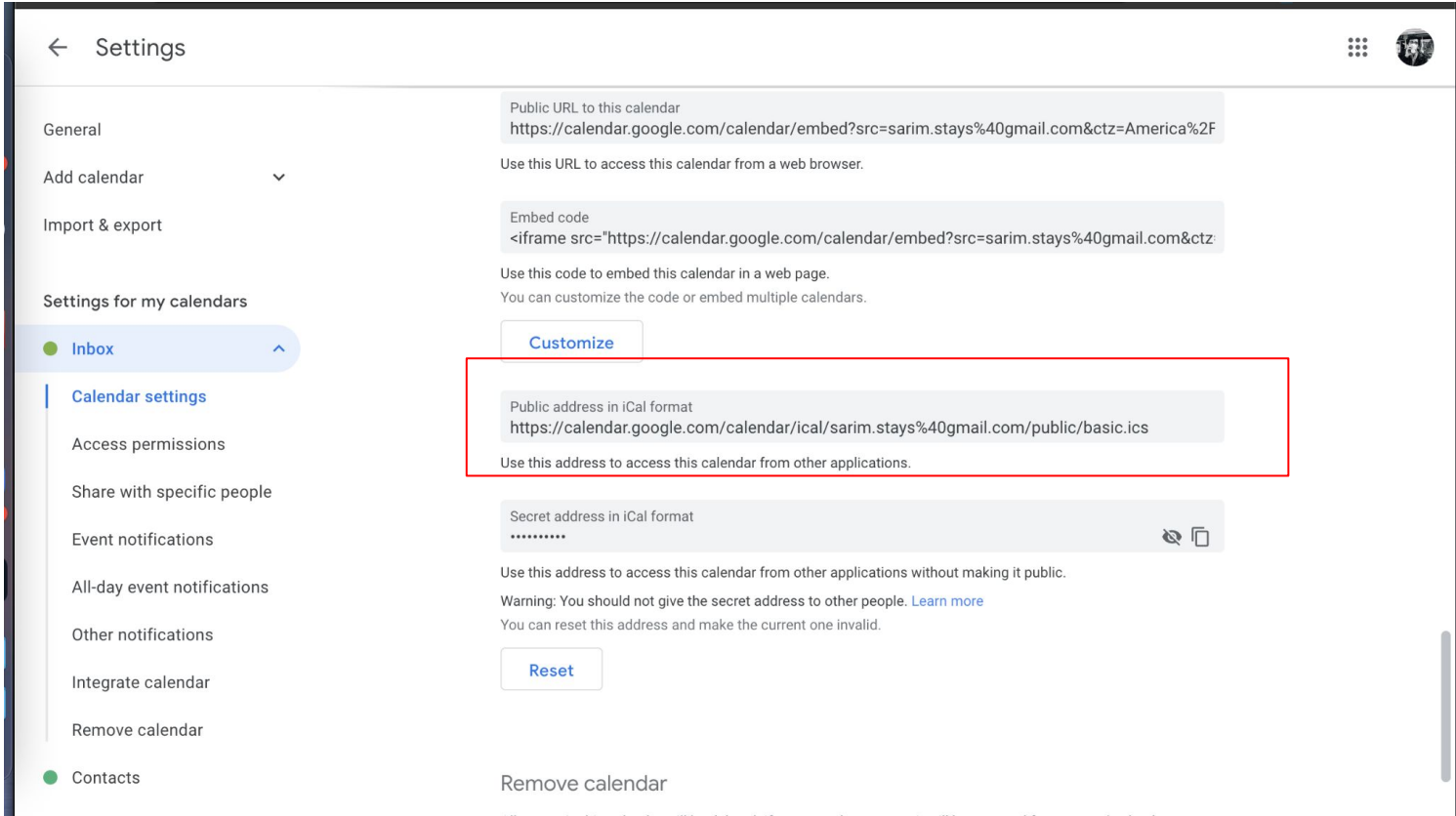


Time to Move

Super exciting spectacular task



Google Calendar auth too hard, iCal feeds instead



The screenshot shows the Google Calendar settings interface. On the left, a sidebar contains a 'Settings' header with a back arrow, and a list of categories: 'General', 'Add calendar', 'Import & export', 'Settings for my calendars', 'Inbox' (selected), 'Calendar settings', 'Access permissions', 'Share with specific people', 'Event notifications', 'All-day event notifications', 'Other notifications', 'Integrate calendar', 'Remove calendar', 'Contacts', and 'Remove calendar'. The main content area is titled 'Settings' and displays three sections for calendar sharing. The first section, 'Public URL to this calendar', shows a URL and a 'Customize' button. The second section, 'Public address in iCal format', is highlighted with a red rectangle and shows the URL 'https://calendar.google.com/calendar/ical/sarim.stays%40gmail.com/public/basic.ics'. The third section, 'Secret address in iCal format', shows a masked address and a 'Reset' button.

← Settings

General

Add calendar

Import & export

Settings for my calendars

Inbox

Calendar settings

Access permissions

Share with specific people

Event notifications

All-day event notifications

Other notifications

Integrate calendar

Remove calendar

Contacts

Public URL to this calendar

`https://calendar.google.com/calendar/embed?src=sarim.stays%40gmail.com&ctz=America%2F`

Use this URL to access this calendar from a web browser.

Embed code

`<iframe src="https://calendar.google.com/calendar/embed?src=sarim.stays%40gmail.com&ctz=America%2F"`

Use this code to embed this calendar in a web page.

You can customize the code or embed multiple calendars.

Customize

Public address in iCal format

`https://calendar.google.com/calendar/ical/sarim.stays%40gmail.com/public/basic.ics`

Use this address to access this calendar from other applications.

Secret address in iCal format

.....

Use this address to access this calendar from other applications without making it public.

Warning: You should not give the secret address to other people. [Learn more](#)

You can reset this address and make the current one invalid.

Reset

Remove calendar

iCal feed is just a text file full of stuff

```
Users > sarimabbas > Downloads > basic (1).ics
1 BEGIN:VCALENDAR
2 PRODID:-//Google Inc//Google Calendar 70.9054//EN
3 VERSION:2.0
4 CALSCALE:GREGORIAN
5 METHOD:PUBLISH
6 X-WR-CALNAME:Inbox
7 X-WR-TIMEZONE:America/New_York
8 BEGIN:VTIMEZONE
9 TZID:America/Los_Angeles
10 X-LIC-LOCATION:America/Los_Angeles
11 BEGIN:DAYLIGHT
12 TZOFFSETFROM:-0800
13 TZOFFSETTO:-0700
14 TZNAME:PDT
15 DTSTART:19700308T020000
16 RRULE:FREQ=YEARLY;BYMONTH=3;BYDAY=2SU
17 END:DAYLIGHT
18 BEGIN:STANDARD
19 TZOFFSETFROM:-0700
20 TZOFFSETTO:-0800
21 TZNAME:PST
22 DTSTART:19701101T020000
23 RRULE:FREQ=YEARLY;BYMONTH=11;BYDAY=1SU
24 END:STANDARD
25 END:VTIMEZONE
26 BEGIN:VTIMEZONE
```

But all it's saying is...

[

{

name: "lunch with John",

start: "april 1st, 10 am ET",

end: "april 1st, 1pm ET",

},

{

name: "office hours for biology",

start:

end:

}

]

Algorithm

- Do we have to plan for the whole week or just for today?
- Get all of today's events
- Get all the free time between them
- Schedule/suggest breaks in that free time

Get all of today's events

- I've taken care of that

```
1  // this function parses an iCal feed e.g. from Google Calendar
2  // it gets the raw data of the feed and transforms it into a list of events
3  async function getCalendarFeed(feedURL) {
4    console.log("Getting calendar feed: %s", feedURL);
5
6    // first, fetch the iCAL feed from the URL
7    const response = await fetch(
8      "https://time-to-move-cors-fetcher.herokuapp.com/" + feedURL
9    );
10   const feedData = await response.text();
11
12   // parse the feed into JavaScript objects
13   const parsedItems = Object.values(ical.parseICS(feedData));
14   const eventItems = parsedItems.filter((e) => e?.type === "VEVENT");
15
16   // each event has a start and an end. These are Date() objects
17   // the reference for handling Dates is given here: https://www.w3schools.com/jsref/jsref\_obj\_date.asp
18
19   // filter the events so that you only have events for TODAY
20   // the heuristic used is that if an events starts or ends today, it is probably today
21   // but this probably doesn't solve all edge cases e.g. what if you had an event that started yesterday and ends tomorrow?
22   // but this is good enough for now
23   const todayEvents = eventItems.filter(
24     (e) => isToday(e?.start) || isToday(e?.end)
25   );
26
27   return todayEvents;
28 }
29
```

Suggest times in between breaks

- Your task
- The MVP of your product
- Fill in the code

```
41 // YOUR TASK: given a list of today's events, can you...
42 //      1. figure out which parts of the day are free
43 //      2. output a list of objects which are suggested breaks
44 // the format of each break object should be as follows:
45 // { start: Date(), end: Date() }
46 function scheduler(todayEvents) {
47     // here is a sample list with a break time scheduled for right now
48
49     // create a break starting right now for 20 minutes into the future
50     const start = new Date();
51     const end = new Date();
52     end.setMinutes(start.getMinutes() + 20);
53     const breakTimes = [
54         {
55             start: start,
56             end: end,
57         },
58     ];
59
60     return breakTimes;
61 }
62
```


This will help

- https://www.w3schools.com/jsref/jsref_obj_date.asp
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date