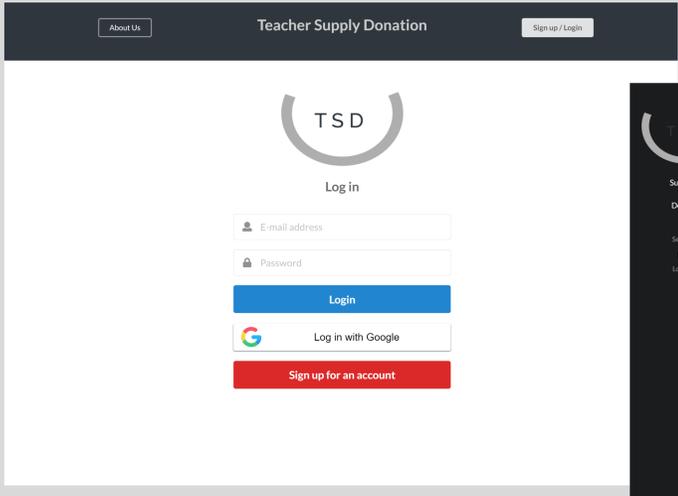


TEACHER SUPPLY DONATION WEB APP

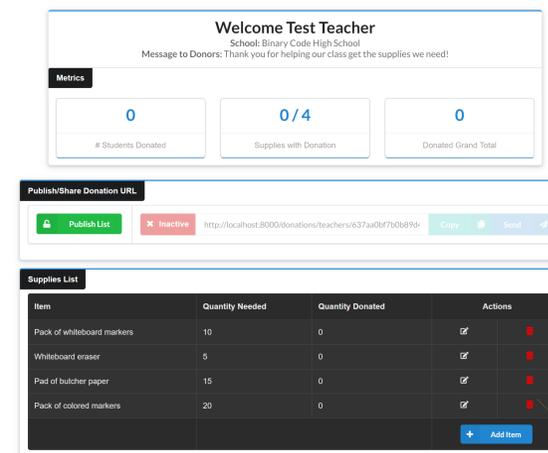
Helping teachers and students collaborate to provide classrooms with learning materials

Team members: *Alice Fisher, Sean Park, Joel Swenddal*

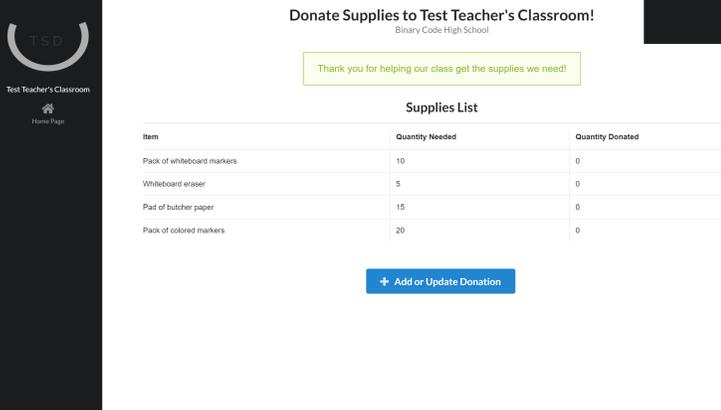




Login page



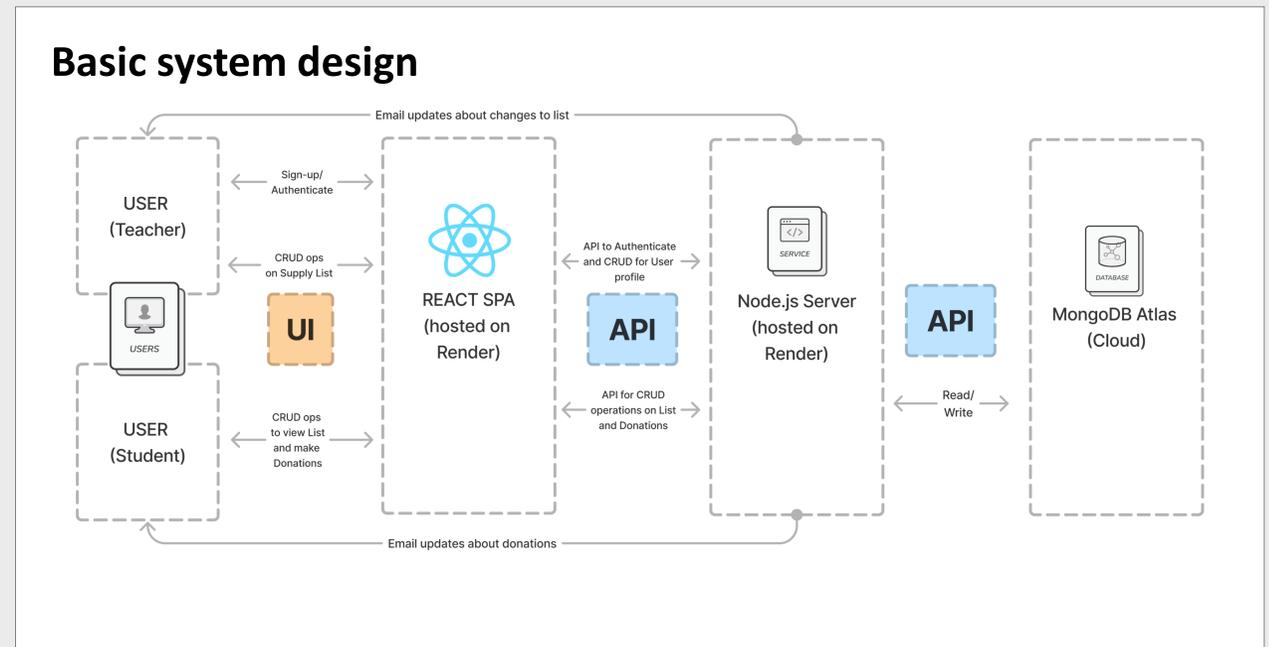
Teacher Dashboard



Public Classroom Page

UI VIEWS

- Login
- Sign up
- Teacher Dashboard (including Supplies, Donors and Metrics)
- Public Classroom
- Unique Student Donation
- Thank You



```

import React, { useState } from 'react'
import { useHistory } from 'react-router-dom'
import { useAuth } from '../hooks/useAuth'
import { useSupplies } from '../hooks/useSupplies'
import { useClassroom } from '../hooks/useClassroom'

function TeacherDashboard() {
  const { login, register } = useAuth()
  const { supplies, addSupply } = useSupplies()
  const { classroom, updateClassroom } = useClassroom()

  const [email, setEmail] = useState('')
  const [password, setPassword] = useState('')
  const [confirmPassword, setConfirmPassword] = useState('')
  const [message, setMessage] = useState('')

  const handleLogin = (e) => {
    e.preventDefault()
    login(email, password)
  }

  const handleRegister = (e) => {
    e.preventDefault()
    register(email, password, confirmPassword)
  }

  const handleAddSupply = (e) => {
    e.preventDefault()
    const { item, quantity } = e.target.elements
    addSupply(item.value, quantity.value)
  }

  return (
    <div>
      <h3>Welcome Test Teacher</h3>
      <p>School: Binary Code High School</p>
      <p>Message to Donors: Thank you for helping our class get the supplies we need!</p>
      <div style="display: flex; justify-content: space-around;">
        <div>Metrics</div>
        <div>0 / 4</div>
        <div>0</div>
      </div>
      <div style="margin-top: 10px;">
        Publish/Share Donation URL:
        <div style="display: flex; align-items: center; gap: 10px;">
          <span style="background-color: #28a745; padding: 5px 10px; border-radius: 4px;">Publish List</span>
          <span style="background-color: #dc3545; padding: 5px 10px; border-radius: 4px; opacity: 0.5;">Inactive</span>
          <input type="text" value="http://localhost:8000/donations/teachers/637aa0bf710b8964" style="border: 1px solid #ccc; padding: 5px 10px; width: 150px;">
          <span style="background-color: #6c757d; padding: 5px 10px; border-radius: 4px; opacity: 0.5;">Copy</span>
          <span style="background-color: #6c757d; padding: 5px 10px; border-radius: 4px; opacity: 0.5;">Send</span>
        </div>
      </div>
      <div style="margin-top: 10px;">
        Supplies List:
        <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;">
          <thead>
            <tr>
              <th>Item</th>
              <th>Quantity Needed</th>
              <th>Quantity Donated</th>
              <th>Actions</th>
            </tr>
          </thead>
          <tbody>
            <tr>
              <td>Pack of whiteboard markers</td>
              <td>10</td>
              <td>0</td>
              <td>✔ ✖ ⚠</td>
            </tr>
            <tr>
              <td>Whiteboard eraser</td>
              <td>5</td>
              <td>0</td>
              <td>✔ ✖ ⚠</td>
            </tr>
            <tr>
              <td>Pad of butcher paper</td>
              <td>15</td>
              <td>0</td>
              <td>✔ ✖ ⚠</td>
            </tr>
            <tr>
              <td>Pack of colored markers</td>
              <td>20</td>
              <td>0</td>
              <td>✔ ✖ ⚠</td>
            </tr>
          </tbody>
        </table>
        <div style="text-align: right; margin-top: 5px;">
          <span style="background-color: #17a2b8; padding: 5px 10px; border-radius: 4px; font-weight: bold;">+ Add Item</span>
        </div>
      </div>
    </div>
  )
}
    
```

Sample Frontend Code

TECHNOLOGIES

- MongoDB Atlas for cloud-based data storage
- Node.js backend with Express HTTP server
- RESTful API
- JavaScript/React Single Page Application frontend
- Authorization/Authentication with JWT and Google OAuth 2.0
- Render for hosting

USER FEATURES

- Teachers create an account and login using a password with the app or authenticate with their Google account.
- Teachers register a supply request list and publish a public URL for their class to view it.
- Students register and select items that they are able to donate.
- Students automatically receive an email confirming their donation and a code allowing them to access and edit their donation commitment if desired.
- Teachers are able to manage their lists (CRUD operations) and monitor the donation activity for their classroom using a Dashboard interface.
- Teachers can download a CSV file of donations activity for their class



DESCRIPTION

TSD is a full stack web application that allows teachers to register lists of requested classroom supplies and allows students to make donation commitments. It also allows both teacher and student users to monitor and update donation activity. A key user design feature is that students can make donation commitments without having a user account or using monetary funds, which makes the interaction simpler for both students and the teacher.

MOTIVATION

Many teachers self-fund classroom learning materials or ask that students and families donate if they are able. There is a need for a tool that allows teachers to publish request lists and students to commit to donating supplies -- without involving monetary transactions between teacher and student. Such a tool asks students to identify what supplies they can contribute, and the student then purchases them and brings them to class. The app optimizes a preferred donation process that many teachers already use in their classes.