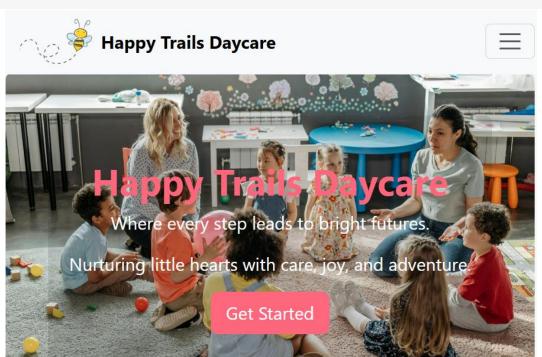
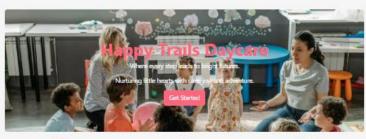


Day Care Management System

Shao Hang Li, Ritu Arora, Qi He











Engaging educational

g educational programs failured for each A secure, bring environment where children to

About Us

Happy Traits Daycare, we foster creativity and growth in a safe, nurturing environment. Our mission is to guide every child on a journey of learning and discovery.

Tastinopolelo

"Happy Trails Daycare has been a blessing for our family. Our child loves it there!" "The caring staff and innovative programs make this daycare exceptional."

Jany Dos Parent

....

John Smith, Educato

Gallery











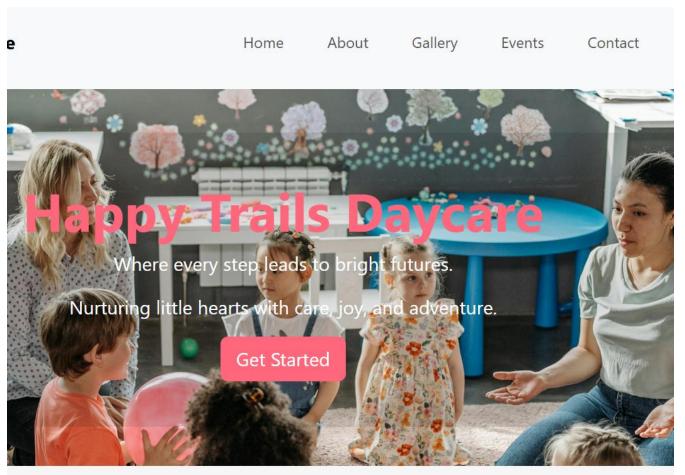


Upcoming Events for Children



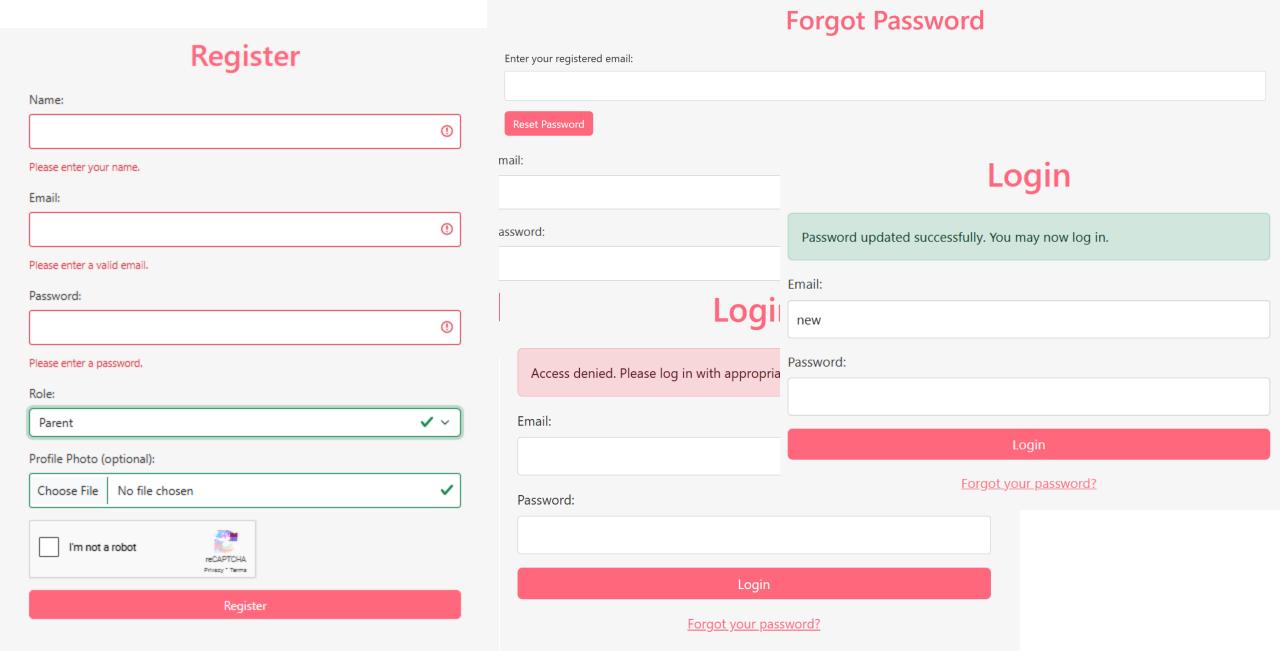


Purpose of the System

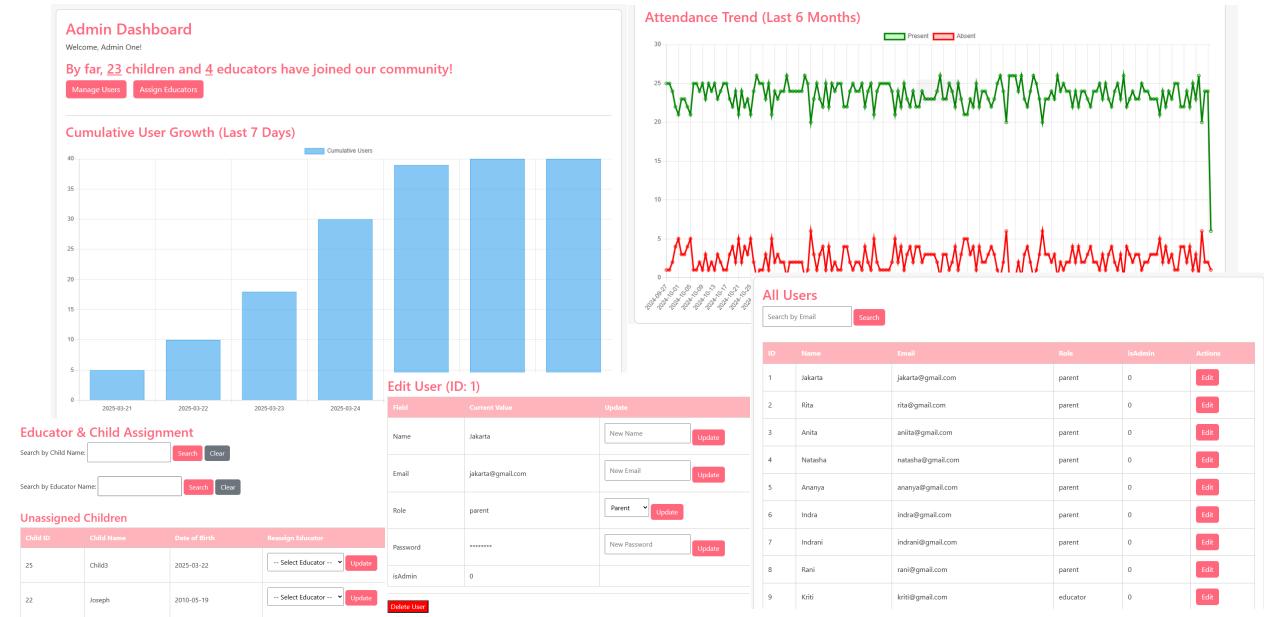


- The goal is to digitize and streamline key daycare tasks such as:
- Recording daily attendance of children
- Tracking child profiles and updates
- Improving communication between staff and guardians
- Ensuring compliance and accountability

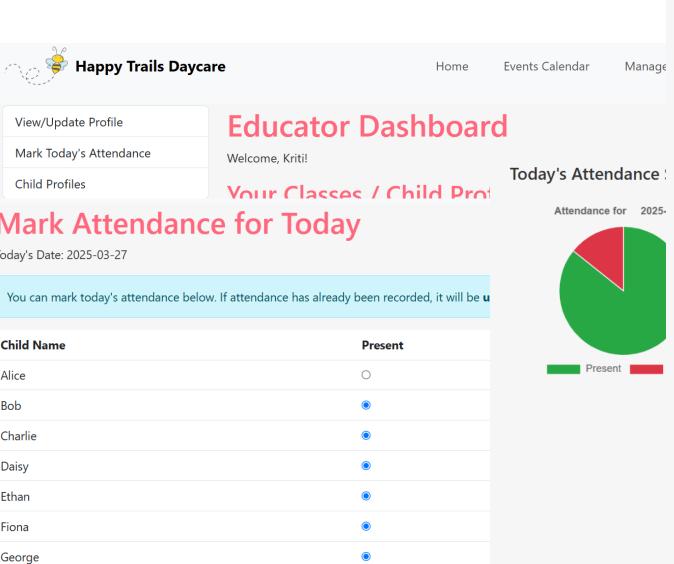
Secure Login & Registration System



Admin Dashboard



Educator Dashboard



Manage Events

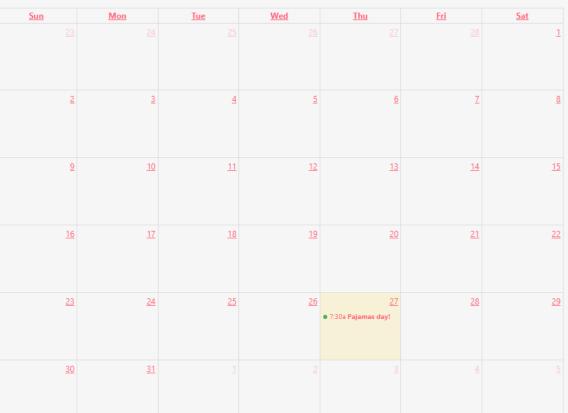


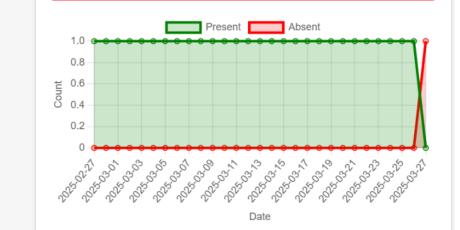




March 2025

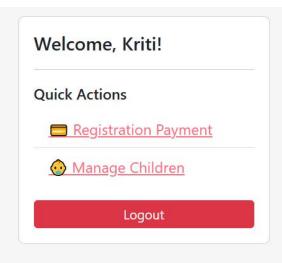




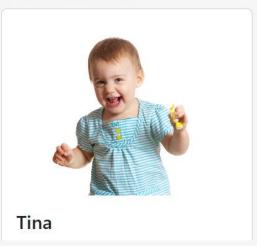


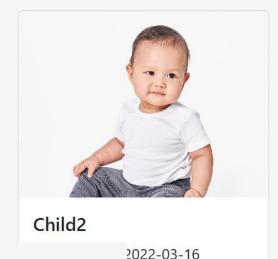
Submit Attendance

Parent Dashboard



Your Children







Date of Birth: 2025-03-22

Upcoming Events

No upcoming events scheduled.

Registration Payment Status

Registration payment completed on 2025-03-26 for 3 child(ren).

Transaction ID: cs_test_a14ndj90GW8c1e7DdQPfeyEuM8KIpOf99t6Up0VWq1XVZNQT5S4zQqWu5x

Payment History

Date	Amount	Children	Status	Transaction ID
Mar 26, 2025 14:26	\$300.00	3	COMPLETED	cs_test_a14ndj90GW8c1e7DdQPfeyEuM8KIpOf99t6Up

Payment Successful Thank you for your payment!

Amount paid: \$300.00

Number of children: 3

Date: 2025-03-27 18:46:04

Transaction ID: cs_test_a1U41mrh7OX7svR7pCxiiKrWsZP3mjuKjV2x5o5DaF05C3taqo7WsI6tPV

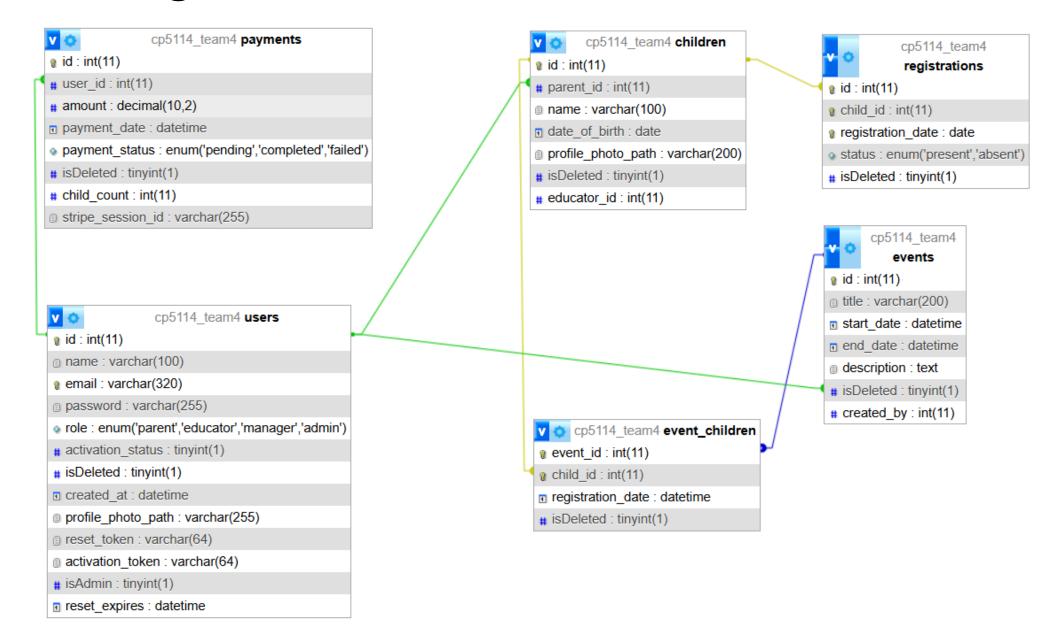
Your registration is now complete. A receipt has been sent to your email address.

Go to Dashboard

Who did what

- Secured role-based login and registration system
 - o Ritu Arora
- Admin dashboard
 - o Qi He
 - Shao Hang (implemented calendar to manage events)
- Educator dashboard
 - o Ritu Arora
 - Shao Hang (implemented calendar to manage events)
- Parent dashboard
 - o Qi He
 - Shao Hang (implemented Events View/Create feature)
 - Shao Hang (integrated Stripe Payment API)
- UI design & project planning
 - o Ritu Arora

Database Design



Cloudflare Integration: How It Works

- You point a subdomain (e.g. cdn.team4.fsd13.ca) to Cloudflare
- Cloudflare caches & serves /uploads/* content globally
- Update file paths:

```
<!-- Before -->
<img src="/uploads/logo.png">
<!-- After -->
<img src="https://cdn.team4.fsd13.ca/uploads/logo.png">
```

Cloudflare Integration: What & Why

Why Use Cloudflare?

Cloudflare acts as a **reverse proxy** and CDN, offering:

- Faster load times (via caching & global edge servers)
- Enhanced security (DDoS protection, SSL, firewall)
- ☑ DNS management with real-time updates
- Reduced bandwidth usage

Main Domain & Subdomains:

All A records for: amir, anatara, dang, david, dylan, evan, gregory, gregory2, haitao, khadis, louis, qi, rima, ritu, shao, team1, team2, team3, team4, and fsd13.ca
 All pointing to 69.16.227.64
 Proxy is enabled (good for caching/CDN)

Essential Services:

- mail, ftp, webmail, cpanel, etc. →

 Present
- www → ✓ CNAME to fsd13.ca
- MX → fsd13.ca with priority 0 (for email)

TXT Records:

- SPF → V=spf1 a mx ip4:69.16.227.64 ~all
- _acme-challenge records → ✓ Valid and intact
- _cpanel-dcv-test-record → Included
- CalDAV/CardDAV TXT paths → Present

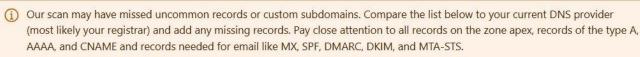
SRV Records:

All related to email discovery, caldav, carddav → DNS only (correct behavior)

How We Set It Up

- Create Cloudflare Account
 - → Add your domain (e.g., fsd13.ca)
- Import DNS Records
 - → Cloudflare pulls existing records automatically
- Update Nameservers
 - → At your domain registrar (e.g., **Domain Robot Enterprises Inc.**), replace the old nameservers (*e.g.*, ns14.datona-1.com, ns15.datona-1.com) with Cloudflare's (*e.g.*, bowen.ns.cloudflare.com, dora.ns.cloudflare.com)
- DNS Propagation Begins
 - → Takes up to 24–48 hours globally
 - → Use tools like Google Dig to confirm
- Traffic Routed via Cloudflare
 - → Static files (e.g., images, CSS) now served from nearest edge server
 - → Real-time control via Cloudflare dashboard (SSL, caching, security rules)

Records we found: 11 A 3 CNAME 1 MX 2 NS 5 SRV 9 TXT



Your traffic is almost ready to proxy

How proxying works

Your DNS records tell Cloudflare where your web content is hosted, so we can hide the origin and proxy your web traffic.



Proxied: HTTP traffic goes through the Cloudflare network. Required for services like caching, smart routing, and Web Application Firewall.



DNS only: HTTP traffic bypasses Cloudflare and goes directly to the origin, but DNS resolution still benefits from our fast and secure network. A gray cloud means proxying is off, no cloud means the record is not eligible for proxying.

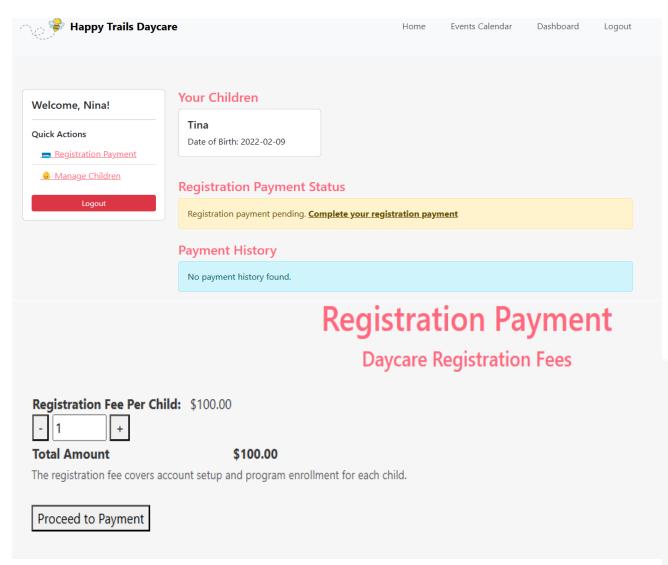
Payment with Stripe PHP/API

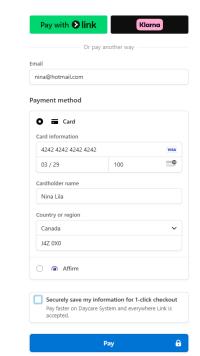
- composer require stripe/stripe-php (More convenient if you're using PHP)

← □ Daycare System TEST MODE

Daycare Registration Fee

CA\$100.00





Payment Successful Thank you for your payment! Amount paid: \$100.00 Number of children: 1

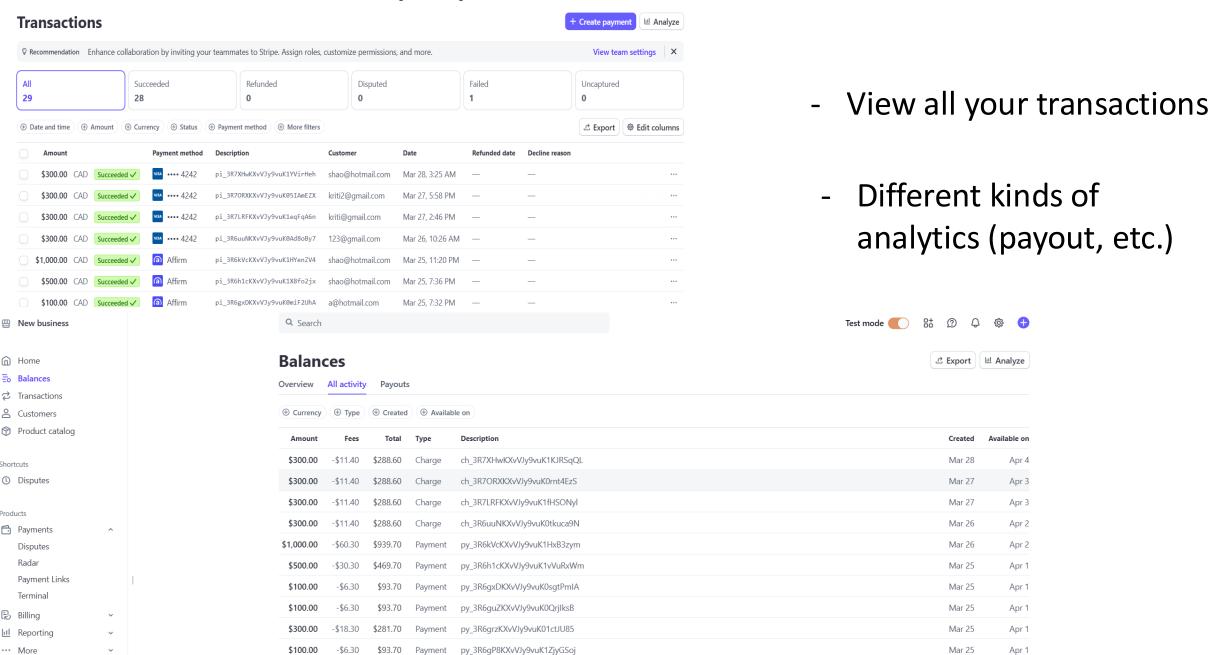
Date: 2025-03-28 10:19:00

Transaction ID: cs_test_a1JvY6UJ6WNd9xjzw1kHM7qfeN7D5cX3HlgPtZEZAtv218jSyXpn3FsTz7

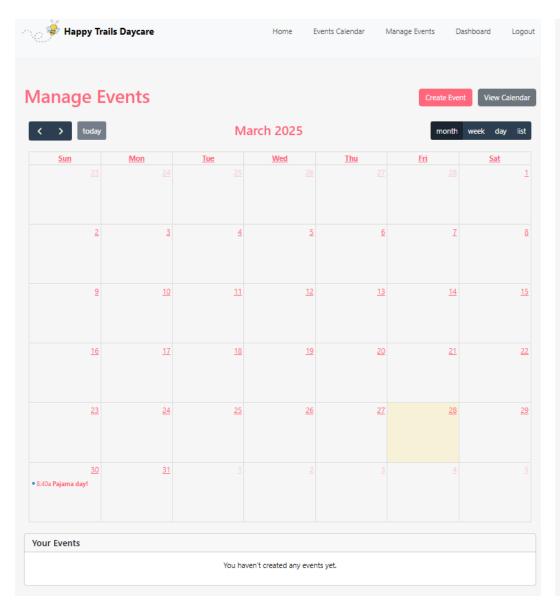
Your registration is now complete.

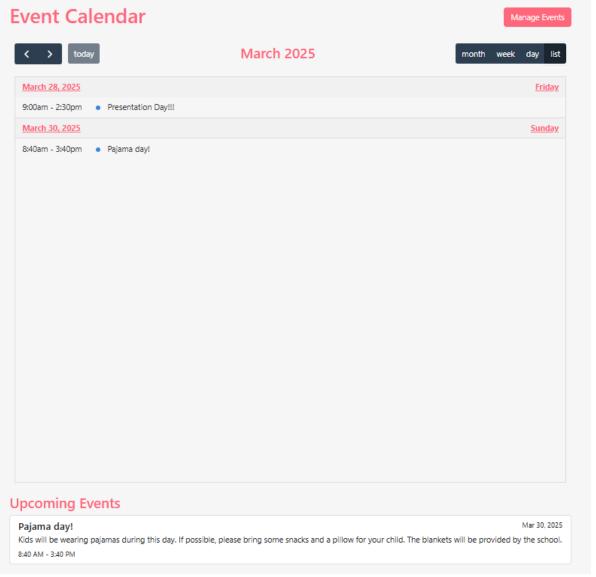
Go to Dashboard

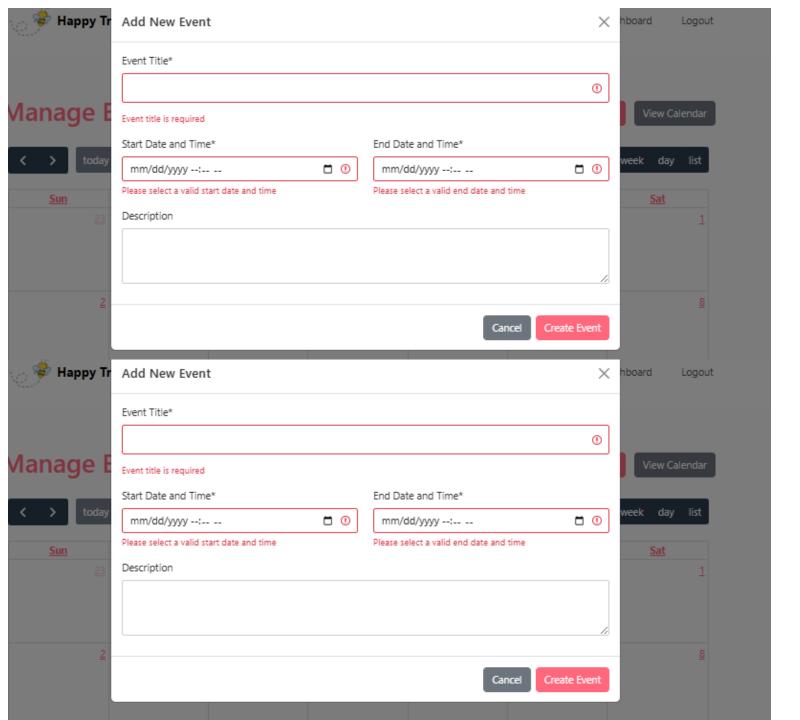
Stripe personal dashboard



FullCalendar for events







- Create/Edit events
- -Validation to successfully create an event
- Parents dashboard
 Vs
- Educator/Admin dashboard

Challenges/Teaching

```
// Create Stripe session
  \Stripe\Stripe::setApiKey($ ENV['STRIPE SECRET KEY']);
  $checkout_session = \Stripe\Checkout\Session::create([
     "mode" => "payment",
     "success_url" => "https://" . $_SERVER['HTTP_HOST'] . "/payment-success?session_id={CHECKOUT_SESSION_ID}",
     "cancel url" => "https://" . $ SERVER['HTTP HOST'] . "/payment?canceled=true",
     "line items" => $paymentDetails['lineItems'],
   Create payment record with session ID
DB::insert('payments', [
     'user id' => $userId,
     'amount' => $paymentDetails['totalAmount'],
     'payment_date' => date('Y-m-d H:i:s'),
     'payment status' => 'pending',
     'child count' => $inputChildrenCount,
     'stripe session id' => $checkout session->id
// Verify with Stripe
 \Stripe\Stripe::setApiKey($ ENV['STRIPE SECRET KEY']);
$session = \Stripe\Checkout\Session::retrieve($session_id);
// Get the payment record using session ID
$payment = DB::queryFirstRow("SELECT * FROM payments
    WHERE stripe session id = %s
    AND user id = %i
    AND isDeleted = 0",
    $session id, $userId
```

);

Fullcalendar.io

Standard Bundle

First, obtain the standard fullcalendar bundle in one of the following ways:

• **Download**: fullcalendar-6.1.15.zip

• CDN: jsdelivr

• NPM: npm install fullcalendar

Then, write the following initialization code:

```
<!DOCTYPE html>
<html lang='en'>
 <head>
    <meta charset='utf-8' />
   <script src='https://cdn.jsdelivr.net/npm/fullcalendar@6.1.15/index.global.min.js'></script>
    <script>
      document.addEventListener('DOMContentLoaded', function() {
       var calendarEl = document.getElementById('calendar');
       var calendar = new FullCalendar.Calendar(calendarEl, {
         initialView: 'dayGridMonth'
       });
       calendar.render();
     });
    </script>
  </head>
  <body>
   <div id='calendar'></div>
  </body>
</html>
```

```
JSON API for fetching events (for FullCalendar)
$app->get('/events/fetch', function (Request $request, Response $response) 
   $events = DB::query(
        "SELECT * FROM events
        WHERE isDeleted = 0
        ORDER BY start date"
   );
   $formattedEvents = array map(function($event) {
       return |
            'id' => $event['id'],
            'title' => $event['title'],
            'start' => $event['start date'],
            'end' => $event['end date'],
            'description' => $event['description'] ?? ''
    }, $events);
   $responseData = json encode($formattedEvents);
   $response->getBody()->write($responseData);
   return $response->withHeader('Content-Type', 'application/json');
```

<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>
					• 9a Presentation Day!!	
<u>30</u>	<u>31</u>					
• 8:40a Pajama day!						

Upcoming Events

Pajama day! Mar 30, 2025

Kids will be wearing pajamas during this day. If possible, please bring some snacks and a pillow for your child. The blankets will be provided by the school. 8:40 AM - 3:40 PM

// Get upcoming events

FullCalendar.io

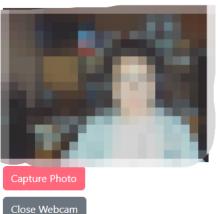
```
Get upcoming events
$today = date('Y-m-d');
$upcomingEvents = DB::query("SELECT * FROM events
                            WHERE DATE(start_date) >= %s
                            AND isDeleted = 0
                            ORDER BY start date ASC
                            LIMIT 10", $today);
```



Image Capture Feature

- HTML5's getUserMedia API
- Live Video Stream
- Optional Activation
- ➤ Base64 Encoding
- Sanitizing andRenaming the File
- Facial Recognition in the Future!

Or use Webcam



```
// Capture photo from webcam
document.getElementById('capture-btn').addEventListener('click', function(){
    const video = document.getElementById('webcam');
    const canvas = document.getElementById('captured-canvas');
    const context = canvas.getContext('2d');
    context.drawImage(video, 0, 0, canvas.width, canvas.height);
    canvas.style.display = 'block';
    video.style.display = 'block';
    video.style.display = 'none';
    document.getElementById('captured_image').value = canvas.toDataURL('image/png')
    document.getElementById('capture-btn').style.display = 'none';
    document.getElementById('reset-btn').style.display = 'inline-block';
});
```

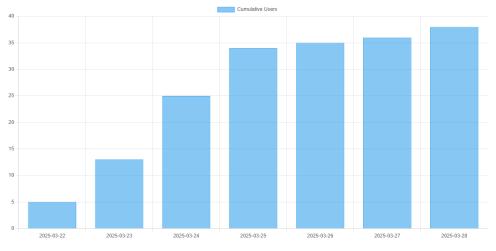
```
$capturedImage = trim(string: $data['captured_image'] ?? '');
if (!empty($capturedImage)) {
    // Expected format: "data:image/png;base64,...."
    $parts = explode(separator: ',', string: $capturedImage);
    if (count(value: $parts) === 2) {
        $imageData = base64_decode(string: $parts[1]);
        // Sanitize child's name: convert to lowercase and replace spaces with underscores
        $sanitizedChildName = strtolower(string: str_replace(search: ' ', replace: '_', subject: $name));
        // Create a unique filename using the child's sanitized name and the current timestamp
        $filename = $sanitizedChildName . '-' . time() . '.png';
        // Save the file to the uploads directory
        file_put_contents(filename: _DIR_ . '/../uploads/' . $filename, data: $imageData);
        // Set the photo path to be saved in the database
        $photoPath = $filename;
    }
}
```

Data Visualization

- Chart.jg library
- Pass PHP-generated arrays directly to the JS code using Twig's json_encode.
- dynamic and interactive

```
// Bar Chart for Cumulative User Growth
const cumulativeDates = {{ cumulativeDates|json encode|raw }};
const cumulativeCounts = {{ cumulativeCounts|json encode|raw }};
const ctxUser = document.getElementById('userGrowthChart').getContext('2d');
new Chart(ctxUser, {
    type: 'bar',
    data: {
        labels: cumulativeDates,
        datasets: [{
            label: 'Cumulative Users',
            data: cumulativeCounts,
           backgroundColor: '■rgba(54, 162, 235, 0.6)',
           borderColor: '■rgba(54, 162, 235, 1)',
            borderWidth: 1
    options: {
        scales: -
            y: { beginAtZero: true }
```

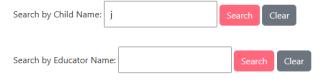
Cumulative User Growth (Last 7 Days)



Flexible Data Retrieval

- LIKE operator
- % wild card
- Ensure soft deleted case
- More forgiving experience

Educator & Child Assignment



Search Results for Children matching "j"

Child ID Child Name		Date of Birth	Current Educator	Reassign Educator	
10	Julia	2018-09-22	Educator One	Educator One V Update	
20	Tina Makhijjj	2018-04-16	Educator Two	Educator Two VUpdate	

```
($searchChild !== '') {
 $mode = 'childSearch';
 // Query children by name (partial match) and ensure child is not soft-deleted
 $childSearchResults = DB::query(query: "
     SELECT c.*, u.name AS educator_name, u.id AS current educator id
     FROM children c
     LEFT JOIN users u ON c.educator_id = u.id
     WHERE c.name LIKE %s AND c.isDeleted = 0
     ORDER BY c.name ASC
  ", parameters: '%' . $searchChild . '%');
elseif ($searchEducator !== '') {
 $mode = 'educatorSearch';
 $educators = DB::query(query: "
     SELECT id, name
     FROM users
     WHERE role='educator' AND name LIKE %s
     ORDER BY name ASC
  ", parameters: '%' . $searchEducator . '%');
 foreach ($educators as $ed) {
     $children = DB::query(query: "
         SELECT id, name, date of birth, educator id
         FROM children
         WHERE educator id = %i AND isDeleted = 0
         ORDER BY name ASC
      ", parameters: $ed['id']);
      $educatorData[] = ['educator' => $ed, 'children' => $children];
```

Future work

- Social Login Integration (Google/Facebook)
- OAuth-based login flow
- Google/Facebook login setup pending for Parent Dashboard
- Will improve convenience & reduce login friction
- **III** Multi-Language Support
- Enable language switching (e.g., English/French)
- Make the system accessible to a broader user base and comply with bilingual requirements.

Summary

User Registration & Login

Role-based signup with email activation, profile photo upload, password reset, and secure login.

Role-Based Access Control

Different dashboards and features for Parents, Educators, and Managers.

Child & Attendance Management

Educators can view assigned children, mark daily attendance, and track attendance history.

Manager Features

Overview dashboard with key stats, educator-child assignments, and event scheduling (partially done).

Security & Enhancements

ReCaptcha protection, mobile-responsive design, dynamic attendance charts.

Thank you:)



Back up

Email Activation

```
// Generate activation token
                                                                  $activation token = bin2hex(string: random bytes(length: 32));
                                                                  // Insert user record
                                                                  DB::insert(table name: 'users', data: [
                                                                       'name' => $name,
                                                                       'email' => $email,
                                                                        'password' => $hashedPassword,
                                                                       'role' => $role
// Store activation token in DB
DB::update(table name: 'users', data: ['activation token' => $activation token], parameters: "email=%s",
$email);
// Build activation link (adjust domain/port as needed)
                                                                                                          name,
$activation link = "https://team4.fsd13.ca/activate?token=$activation token";
                                                                                                          "Y-m-d H:i:s")
// Clear form data on successful registration
unset($ SESSION['formData']);
if (sendActivationEmail($email, $name, $activation link)) {
   $devLink = "<br><<strong>Dev/Test:</strong> <a href='{$activation link}' target=' blank'>Click here to
   activate</a>"; // remove for production
   $flash->addMessage('success', "Registration successful. Please check your email to activate your account.
   $devLink");
} else {
    $flash->addMessage('error', "Registered, but activation email failed to send.");
return $response->withHeader(name: 'Location', value: $router->urlFor(routeName: 'login'))->withStatus
(code: 302);
```

Email Activation

```
function sendActivationEmail($toEmail, $toName, $activationLink): bool

{
    $subject = 'Activate Your Account';
    $htmlBody = "Click the following link to activate your account: <a href='{$activationLink}'>Activate Account</a>
    a>";
    $altBody = "Copy and paste this link in your browser to activate your account: {$activationLink}";

    return sendEmail(toEmail: $toEmail, toName: $toName, subject: $subject, htmlBody: $htmlBody, altBody...$altBody);
}
```

Email Activation

```
function sendEmail($toEmail, $toName, $subject, $htmlBody, $altBody): bool
                                                  require once DIR . '/vendor/autoload.php';
                                                  $env = $ ENV['APP ENV'] ?? 'dev';
                                                  $mail = new PHPMailer(exceptions: true);
                                                  try {
                                                      $mail->isSMTP();
                                                      if ($env === 'prod') {
                                                         $mail->Host
                                                                          = $ ENV['MAIL HOST PROD'];
                                                         $mail->Username = $ ENV['MAIL USERNAME PROD'];
To ensure email deliverability using our own domain:
                                                         $mail->Password = $ ENV['MAIL PASSWORD PROD'];
                                                                          = $ ENV['MAIL PORT PROD'];
                                                         $mail->Port
e.g., noreply@team4.fsd13.ca
                                                         $mail->SMTPSecure = $ ENV['MAIL ENCRYPTION PROD'];
                                                         $mail->setFrom(address: $ ENV['MAIL FROM EMAIL PROD'], name: $ ENV['MAIL FROM NAME PROD']);
                                                                       = $ ENV['MAIL HOST'];
                                                         $mail->Host
                                                         $mail->Username = $ ENV['MAIL USERNAME'];
  $mail->SMTPAuth = true;
  $mail->addAddress(address: $toEmail, name: $toName);
                                                                                                     ], name: $ ENV['MAIL FROM NAME']);
  $mail->isHTML(isHtml: true);
  $mail->Subject = $subject;
  $mail->Body
                     = $htmlBody;
  $mail->AltBody = $altBody;
  $mail->send();
  return true;
catch (Exception $e) {
  error log(message: "Email could not be sent. Mailer Error: {$mail->ErrorInfo}");
  return false;
```