

Product URL

Please sign up for an account to access our website [here](#) (or use demo account ID: sangmoonh / Password: sangmoonh)

Account Information

The accounts for the analytics dashboards on Cloudinary and Vercel have been sent to Dr. Shazia privately, as the function should only be accessed by administrators.

Technical Detail

Project Overview

- Framework: Next.js (React-based)
- Styling: Tailwind CSS
- Language: TypeScript
- Deployment Platform: Vercel
- Repository Management: Git + GitHub
- Cloud Storage: Cloudinary

Usage

For End Users

1. Open <https://iconceptsorthodontics.vercel.app/>.
2. Register an account or sign-in the demo account (ID: sangmoonh / Password: sangmoonh).

For Developers

1. Install software following [Requirements](#).
2. Activate the frontend in the terminal.

```
cd IC-src/frontend
npm run dev
# yarn dev # alternatives
# pnpm dev
# bun dev
```

3. Visit `http://localhost:3000` in the browser to see the frontend page.

[!WARNING]

This project uses [LastPass](#) for password management. Do not hardcode passwords in the codebase or expose them to external stakeholders. Please contact management staff if you require relevant access.

Requirements

Prettier

This extension ensures a consistent style for frontend coding files.

1. Install [Prettier on VS Code](#).
2. Use Prettier to format files. You can also configure "Format on Save."

Dependencies

Install dependencies for JavaScript (Node.js 20.x).

```
cd IC-src/frontend
npm install
```

Repository Structure

Name	Purpose	URL
Upstream	Official team repository for collaborative development	https://github.com/FEIT-COMP90082-2025-SM1/IC-RedBack
Origin	Personal repository for deployment via Vercel	https://github.com/icredback/iConcepts-Orthodontics

All collaborative development is done on the upstream repository using feature branches and pull requests. The origin repository is used solely for production deployment via Vercel.

Workflow

See [Workflow](#) on Wiki for styles and conventions.

Deployment Manuals

Deployment via Vercel

This project is connected to **Vercel** through **GitHub integration**. Each push to the `main` branch of the origin repository will trigger a new deployment automatically via Vercel's built-in **CI/CD pipeline**.

Repository: <https://github.com/icredback/iConcepts-Orthodontics>

Automatic Deployment (CI/CD)

1. Ensure your changes are pushed to the `main` branch.
2. Vercel will automatically deploy the latest version using its CI/CD workflow.
3. You can monitor build status and live deployments directly on your [Vercel Dashboard](#).

Environment Variables

Environment variables must be configured in your Vercel project settings:

Vercel → Project Settings → Environment Variables

Important Guidelines:

- **Do NOT commit credentials** or sensitive information to Git.
- Add `.env`, `.env.local`, and similar files to `.gitignore`.
- Only expose variables using the `NEXT_PUBLIC_` prefix if they need to be available on the client side (e.g., in the browser).
- Cloudinary API **keys should not be exposed**; only use public delivery URLs (e.g., `https://res.cloudinary.com/...`).

Security Notes

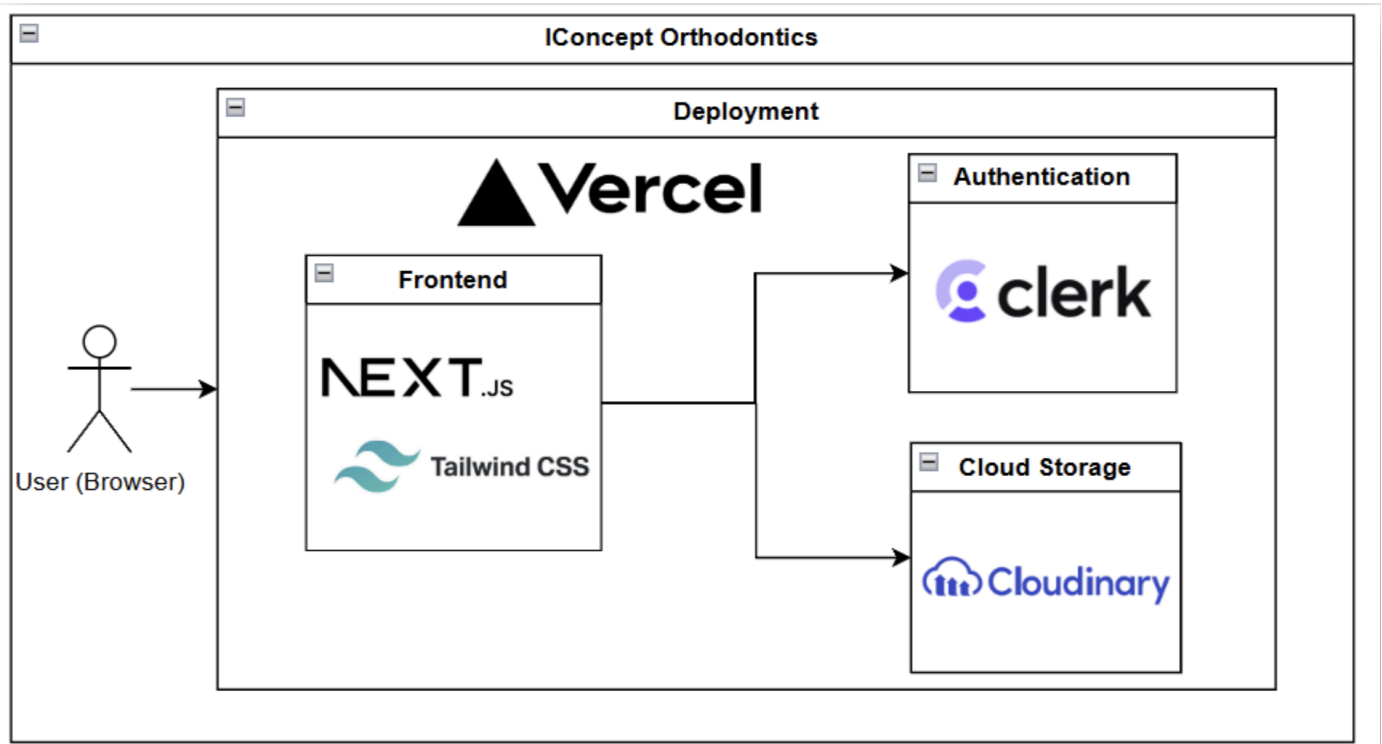
- Do **not hardcode passwords** or secrets in the codebase.
- The project uses [LastPass](#) for secure password sharing. Contact the management team if access is needed.

Additional Notes

- This project is a **front-end-based** educational platform.
- There is **no custom backend** or database configured.
- User authentication is handled via [Clerk](#).
- All media content (images/videos) is hosted and optimized via [Cloudinary](#).

Design Architecture

The system architecture of the *IConcept Orthodontics* website is built on a modern serverless stack. The frontend is developed using **Next.js** and styled with **Tailwind CSS**, and it is deployed via **Vercel**. User authentication is handled by **Clerk**, while media assets are managed and stored using **Cloudinary**. Users interact with the application through their browser, and all services are seamlessly integrated into the Vercel deployment.



Future Development and Limitations

Client's Expectations

1. **Search bar feature:** A search bar on the home page to quickly retrieve the materials for studying.
2. **Real-time analysis:** The real-time analysis of recording the screen time on each chapter page to track the time that users spent on pages. With this information, the administrator can adjust the chapter content to make it easier to understand.

For Developers

1. **Dynamic signed URL API of Cloudinary:** The URLs of the assets are static and hardcoded in our code currently. To enhance the security of our website, the future team can consider using the dynamic signed URL API of Cloudinary to generate links to the assets.
2. **Reliance on free services:** Since we have zero budget at the moment, we can only access the free tier with limited storage and functions of analysis. If more materials are required to be uploaded to Cloudinary to expand the textbook content, then an investment of money is needed.