

## Project report

CT30A3204 Advanced Web Applications

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GitHub repository: <https://github.com/mrMikoma/Stinder>

## AI usage in the project

I have used AI tools such as ChatGPT and Github Copilot during development process. ChatGPT for better understanding how to do certain functionalities like mongoose database search queries. Copilot for streamlining development process and as debug tool. Images in the "images" directory are not my own. Those images are made with AI and are used as dummies to showcase functionalities.

## Features

Feature	Max points
Basic features with well written documentation	25
Utilization of Next.js framework	5
Translation of the whole UI in two or more languages	2
Created at timestamp is stored and shown within chat	2
<b>TOTAL</b>	<b>34</b>

Table of features.

## Technology choices

Technology	Usage	Why?
Next.js 14	Project framework	Combines frond-end and back-end into one package.
MongoDB	Database	Document based database learned during the course.
mongoose	Database object modeling	Tool used during the course, makes database handling easy.

JSONwebtoken	Session authentication	JWT is simple and durable way of securing sessions as cookies.
react-icons	Icons	Nice looking icons.
bcryptjs	Password hashing	Always hash passwords.
i18next	Language option	Wanted to learn translations.
zod	Input validation	There is never enough validation.
Tailwindcss	UI CSS styling	To make webpage more responsive and ease of styling.

Table of technologies used.

## Installation guidelines

### 1. Prerequisites

(I have used PopOS 22.04 for development, so Linux usage is recommended)

Ensure you have the following installed:

Node.js (version 18.18.2 used), MongoDB, Docker and Git

### 2. Setting Up the Development Environment

**Clone project from GitHub (or copy files):**

```
git clone https://github.com/mrMikoma/Stinder
```

```
cd Stinder
```

**Install dependencies:**

```
npm install
```

### 3. Set up Database

**Use Docker for MongoDB:**

```
docker pull mongo
```

```
docker run -d --name mongodb -p 27017:27017 mongo
```

### 4. Configuring Environment Variables

Create a .env.local file in the root of your project and add the following data:

```
AUTH_SECRET=<your_very_secret_key>
```

MONGODB\_URI=mongodb://localhost:27017

DB\_NAME=<your\_database\_name>

Replace auth and dbname with your own.

## 5. Running the Development Server

**Start the Next.js development server:**

```
npm run dev
```

Your Next.js application should now be running locally at <http://localhost:3000>

## User manual

First register and then log in to access the main page. At home page, see navbar and options to match, chat and see your profile. You can also change language and sign out.

On the register page you register with unique email and give username and password. On the login page you sign in with your email and password.

On the home page you can see your profile and navbar. At matching page, you can see other users and like them. After users have liked each other both ways, you can go chat with them on the chat page. On the profile page you can see your liked and disliked users and also change your profile username and bio text.

Also, on the navbar, there are debug tools to help you test the application. With debug tools, you can create dummy users, log users and chats and make everyone like your user.

As I have had limited time developing this project, the project is not so well tested, and many errors can be found. Known issue is for example that there is no good error handling for registering and log in. Also, the server actions should be protected with authentication checking.