B.R.A.D. Installation Guide

Introduction

BRAD is a web-based system that consists of a front-end application and a back-end API. The system uses a MongoDB database and includes bot integration and email services. To run BRAD, you need to install Docker and Node.js, clone the repository, configure environment variables, and start the Docker containers. This guide covers installation on **Windows**, **macOS**, and **Linux**, and ensures all required dependencies are correctly set up.

Prerequisites

Before installing BRAD, ensure you have the following software installed:

Software	Version	Installation Instructions
Git	≥ 2.40	Install Git
Docker	≥ 24.0	Install Docker
Docker Compose	≥ 2.20	Usually bundled with Docker; verify using `docker-compose --version`
Node.js	≥ 20.0	Install Node.js
npm	≥ 9.0	Installed with Node.js
Text Editor	Any	Recommended: VS Code
React	≥ 18.0	Installed via npm (already part of this repo)
Next.js	≥ 14.0	Installed via npm (already part of this repo)
TailwindCSS	≥ 3.0	Installed via npm (already part of this repo)

> **Note:** For Windows users, enable WSL 2 if running Linux containers. For macOS, ensure Docker Desktop has proper permissions.

Installation

1. Clone the Repository

Open your terminal and run:

```
git clone https://github.com/COS301-SE-2025/BRAD.git
cd BRAD
```

2. Setup Environment Variables

Copy the example environment file and fill in your secrets:

```
cp .env.example .env
```

Open .env in your favorite text editor and update the values as needed, for example:

```
JWT_SECRET=your_jwt_secret_here
BOT_ACCESS_KEY=your_bot_access_key_here
EMAIL_USER=your_email@example.com
EMAIL_PASS=your_email_password
```

Important: To get the correct keys and passwords, contact a contributer of the BRAD project

3. Start the Docker Containers

Make sure you have Docker installed. Then run:

```
docker-compose up --build
```

Deployment/Running

Starting the Application

For different starting modes:

(showing container logs)

```
docker-compose up --build
```

or

(faster startup if volumes already exist)

```
docker-compose up
```

or

(running in the background)

```
docker-compose up --build -d
```

Accessing the Application

Once Docker has started all services successfully, open your browser and go to the following URL:

```
http://localhost:5173
```

> If you are running this on a remote server, replace `localhost` with the server's IP or domain name.

Stopping the Application

To stop the running containers, run:

(simple shutdown)

```
docker-compose down
```

or

(keyboard shortcut)

```
CTRL + C
```

or

(removes docker volumes)

```
docker-compose down -v
```

User Manual

For guidance on using the system once installed, please refer to the BRAD User Manual: BRAD-Developer-Guide