# Group 7
# Project: Habit tracker

| Joe Lebedev | Shanyu Thibaut Juneja | Trung Dang | Zachary Tobey |
|---|---|---|---|

1. Architecture (Zachary)

Infrastructure will be hosted on Coolify on a personal Hetzner node. The main API will be hosted behind an NGINX reverse proxy to access the backend service.

2. Database (Joe)

The database of choice for this particular project is Postgresql given its fast speed, compatibility with our data models previously done, and general simplicity for deployment.

3. Frontend (Trung)

The frontend will be using Dart as a language and Flutter as a framework. This allows us to prototype a mobile application very fast with little to no difficulty, and provides us with a rich and well documented dev ecosystem, friendly for unfamiliar app developers like ourselves.

4. Backend (Thibaut)

The backend will be using Java as a language and Spring Boot MVC as a framework. This allows us to easily create a compatible backend service without needing to write any CRUD sql queries as JPA handles all of said logic for us.

| Generate a URL request | Determine who/what responds to it | Respond | Get/put data | Send results back |
|---|---|---|---|---|
| Flutter App | Flutter (Internal) | The requested mobile display view | Local storage | Flutter themed native pages |
| Flutter App | Spring Boot | API queries | CRUD models (json) | Flutter ingestible data (json) |