

# Introduction

This page contains a guide on how to build and deploy the Quick Check software.

## Project Repository

### Repository service

- Controllers: handle http requests and responses
- DTOs (Data Transfer Objects): received from and send back to client, help us to create client specific views
- DB:
  - Entities: represent a table in the DB
  - Repositories: interface to communicate with DB
- Services: orchestra data transfer between client and DB (whatever needs to happen, happens in one of the services)

## Build Process

## Deployment for Development

### Prerequisites

Docker is used to isolate each service (i.e. mysql database, springboot application) that we are working on and to be able to develop across different environments.

1. [Install Docker](#)
2. Start Docker on your machine

### Launch development container

1. Open terminal and cd in root directory
2. Run command `docker compose up`

By executing the last command, docker will create the following containers.

- Container "database" is based on an image of a mysql:8
- Container "service" is based on an image of openjdk:11
- Container "webserver" is based on an image of nginx

### Extending the service

To be able to deploy your changes to the service you need to fire a build command within your IDE.

To fire a build command in IntelliJ press command + F9 on Mac or from Menu Build --> Build Project

The build command causes springboot to restart within the container and apply your changes.

## Testing Backend

1. [Launch development container](#)
2. Open another tab in your terminal
3. Run the following commands
  1. `docker exec -it service bash` (enter docker container service with a bash script)
  2. `cd app` (directory app contains pom.xml, needed to run mvn command)
  3. choose one of the following:
    1. `mvn test` to run all tests
    2. `mvn test -Dtest=classname` to run all tests within classname
    3. `mvn test -Dtest=classname#method` to run a single method within classname

## CORS Configuration

We used a CORS configuration for defining rules for identification of origins. These origins are allowing access to our buckets