

# Create spring boot project

For example using the spring-boot command line tool.

```
# install the spring-cli
brew tap spring-io/tap
brew install spring-boot

# initialize spring project

spring init --dependencies=web,data-jpa,flyway,postgresql,testcontainers,lombok,restdocs,validation \
--java-version 11 --package-name com.fcoach --name api springboot-postgres
# use 'spring init --list' to discover dependencies
```

# Download Sample Project

```
cd myprojects  
git clone git@github.com:fredfredfred/ah-springboot-postgres.git
```

# Spring Data, JPA

- [Spring Data JPA](#)
- [Accessing Data with JPA](#)

# Spring Data Repository

```
@Repository
public interface PlayerRepository
    extends JpaRepository<Player, Long> {

    List<Player> findPlayerByName(String name);
    Page<Player> findPlayerByBirthdayLessThanEqual
        (LocalDate since, Pageable pageable);

}
```

# JPQL

SQL like query language with Java objects support (dot notation).

```
@Query("select p from Player p where p.birthday >= :sinceDate")  
List<Player> findPlayersBornSince(@Param("sinceDate") LocalDate since);
```

# Integration Testing

- [Testcontainers](#)
- [Testcontainers Postgres Module Reference Guide](#)
- Non-docker alternative: H2 in memory DB

