



One tier

UI+BL+Data

Two tier

UI+BL -> Data storage

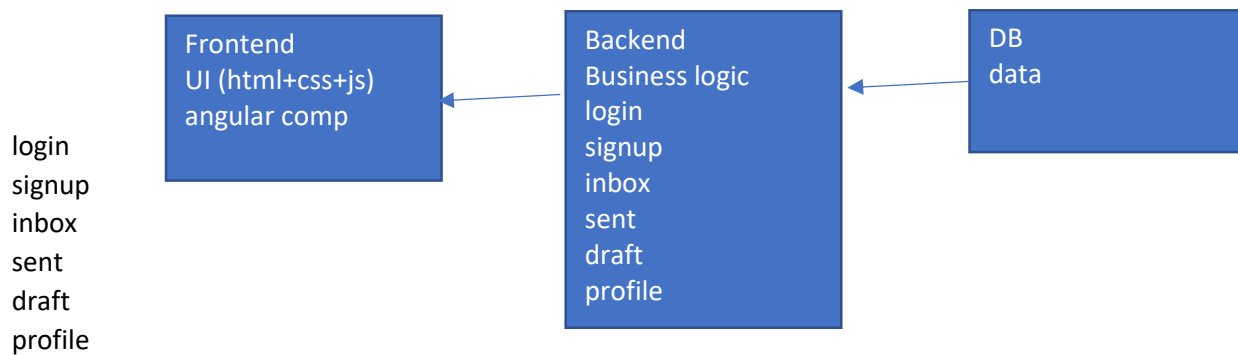
UI -> BL+Data storage

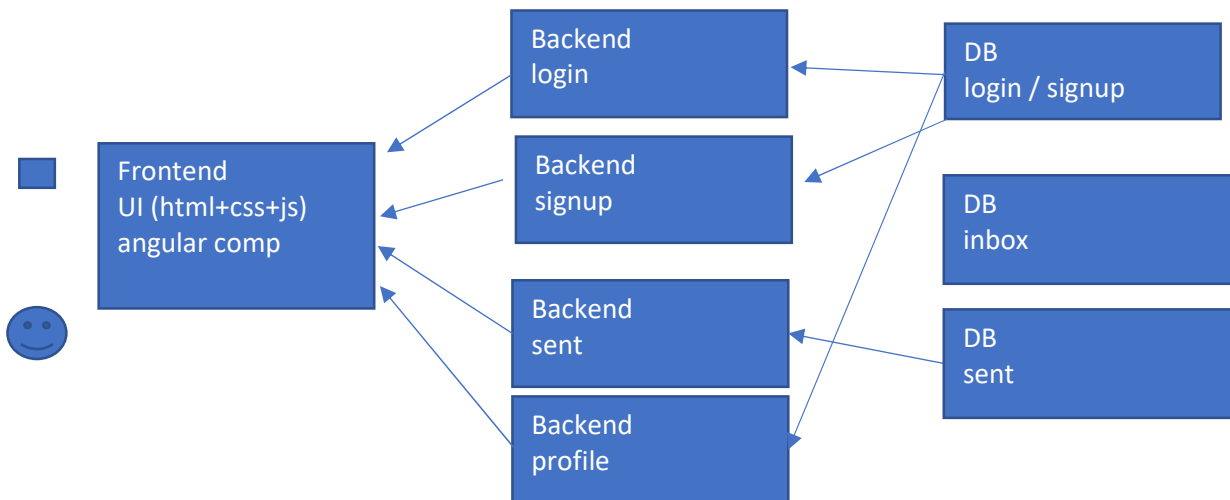
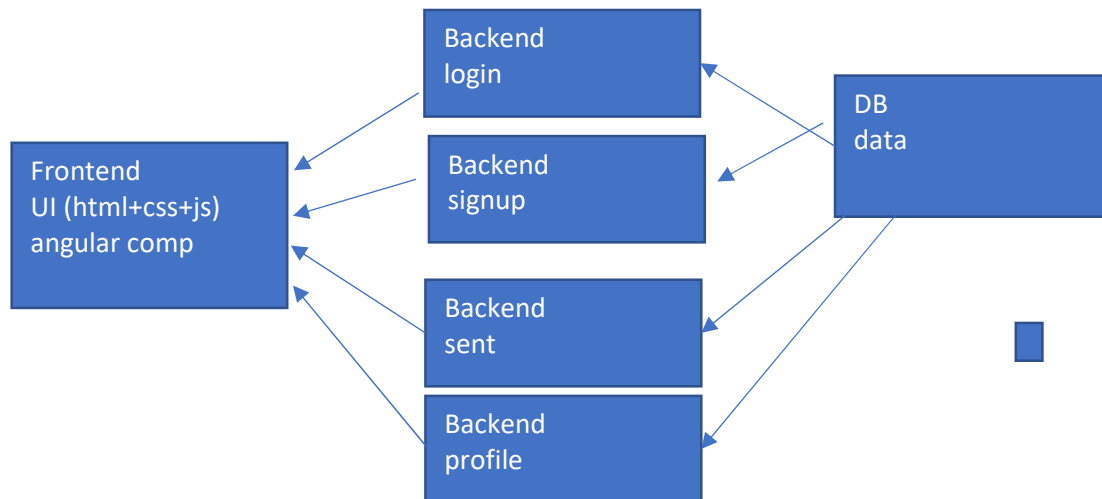
fat client

thin client

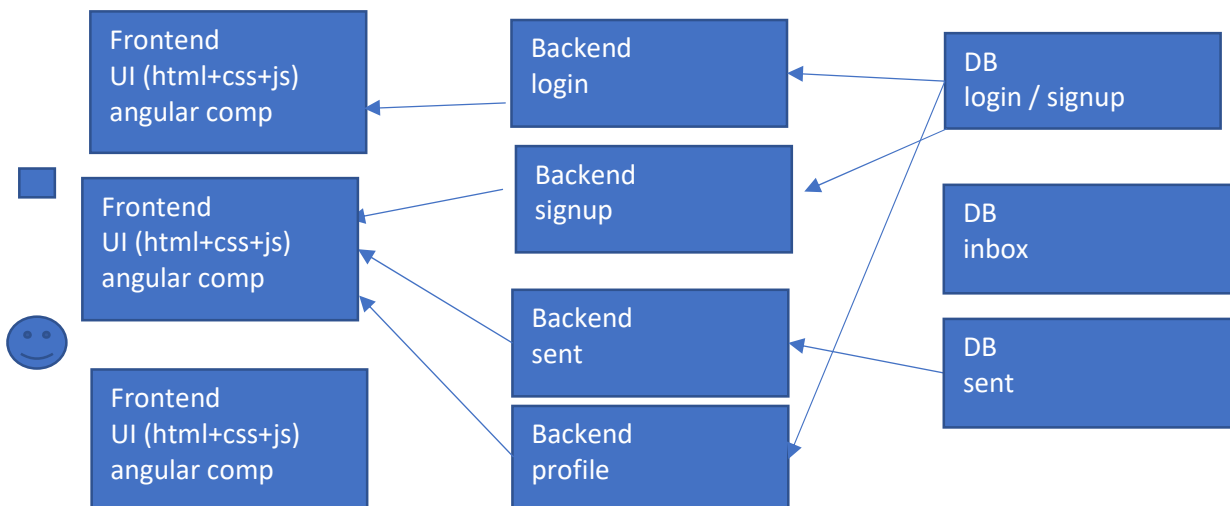
Three tier

UI <-> BL <-> Data storage





N-Tier



backend application

can be called as middleware

connects FE with Datastore

Business logics implemented

- authentication

- applicatin flow

Tools

IDE IntelliJ/Eclipse/Visual Studio Code/Netbeans/..

Maven Project management tool

tomcat Webserver, used to host application

Maven

Project management tool

- dependecy management

- war/jar/ear (package)

- versioning

- building(class/configurations/properties/....)

Maven application can be

- created

- cleaned

- deployed

- built

- ..

- by using commands / wizards

Artifact

name of application

group

packages (com.abcd.myapp.*)

pom

Project Object Model

xml file

Holds core level project configuration

- applicatine name

- group

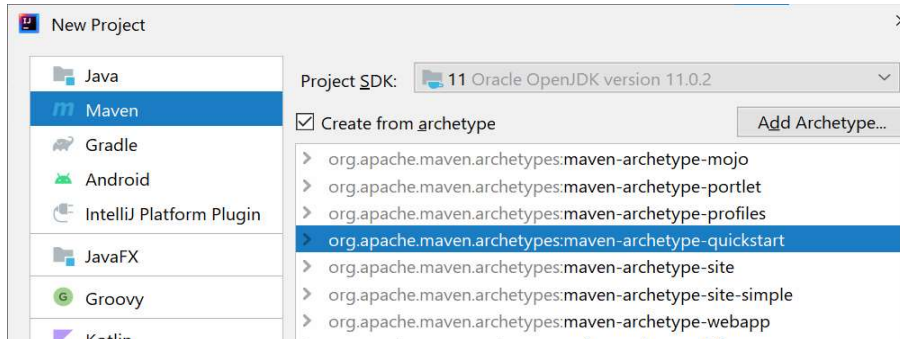
- version of java

packaging (war/jar)
dependencies
plugins

Steps to make new maven project

1 File -> new project -> maven (displays list of pre-defined maven archetypes)

quickstart (console application)
webapp (webapp)

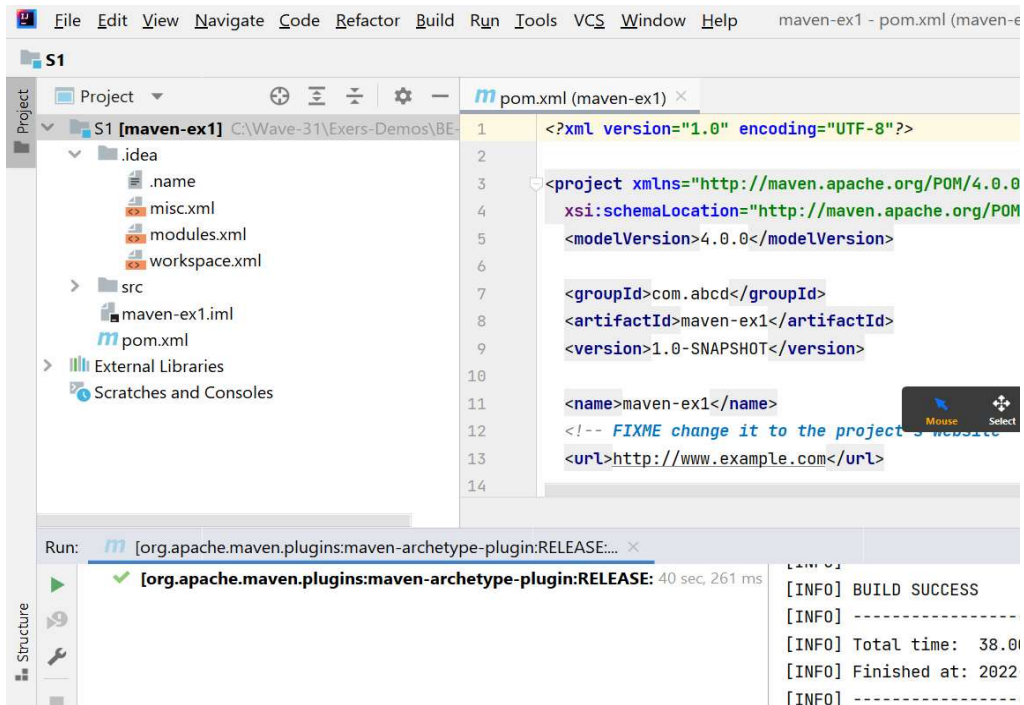


2 Select the location to create maven application

The screenshot shows the 'New Project' dialog box with the following fields filled out:

- Name:** maven-ex1
- Location:** C:\Wave-31\Exers-Demos\BE-C1\S1\
- Artifact Coordinates:**
 - GroupId:** com.abcd
The name of the artifact group, usually a company domain
 - ArtifactId:** maven-ex1
The name of the artifact within the group, usually a project name
 - Version:** 1.0-SNAPSHOT

3 Project created



Repository

Collection of jars

How to add dependency to project

