

The Spring Framework

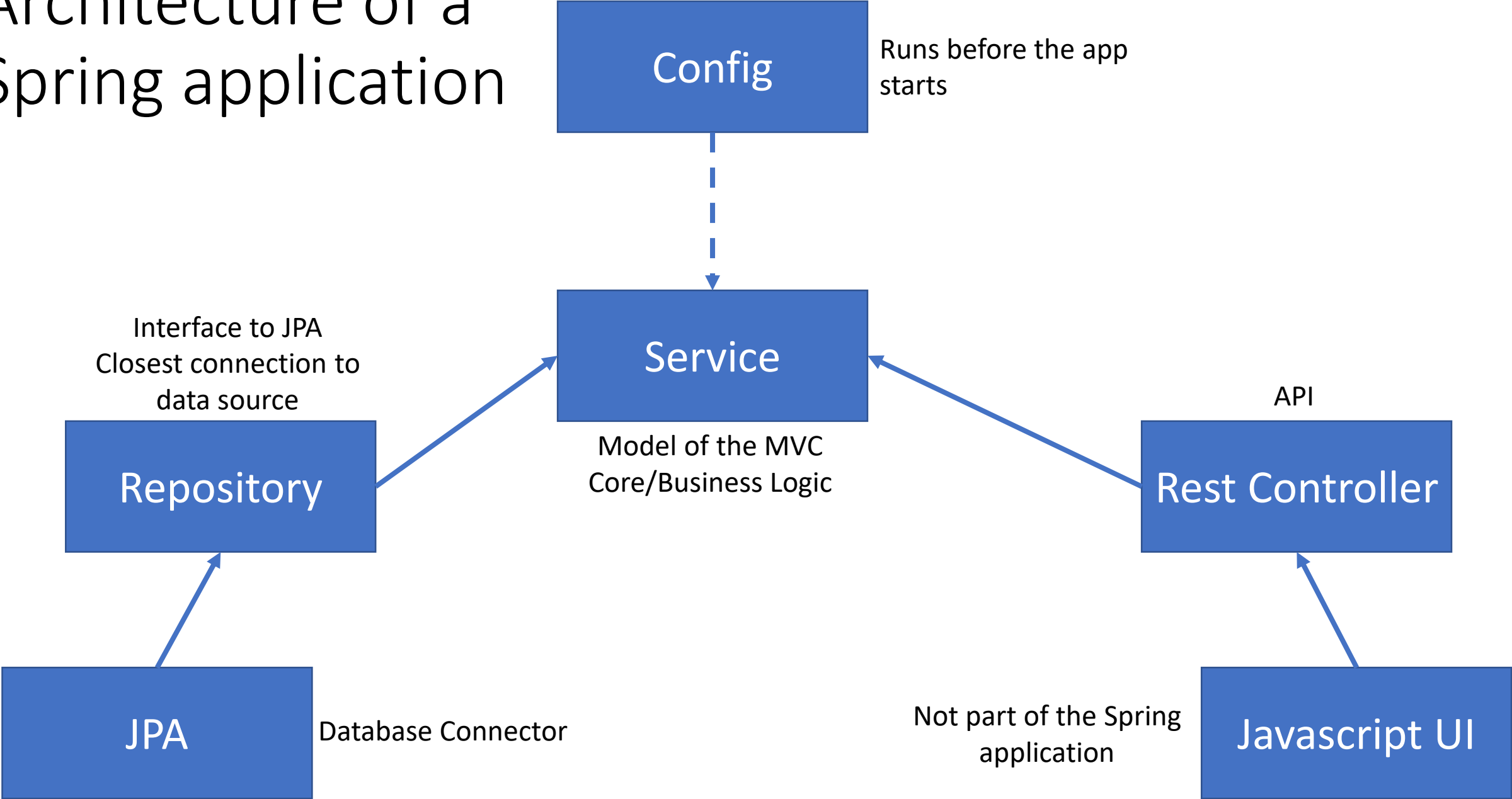
CSE 331

University of Washington

What is the Spring Framework?



- Spring is an application framework for Java
 - Provides standard functionality so you don't have to
 - Contains extensions for web applications
- Libraries vs frameworks:
 - Using a library: your code owns **main** and makes calls to the library
 - Using a framework: the framework owns **main** and makes callbacks to your code
- Today's lecture: demo a web application that manages subscribers to a mailing list

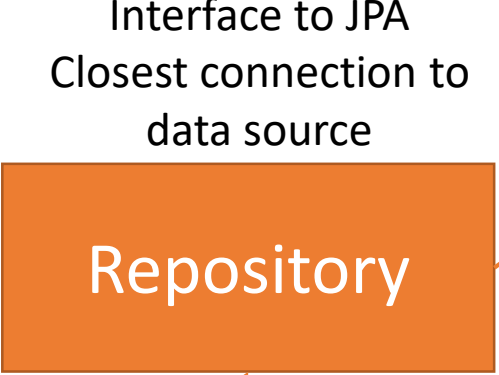
Architecture of a Spring application



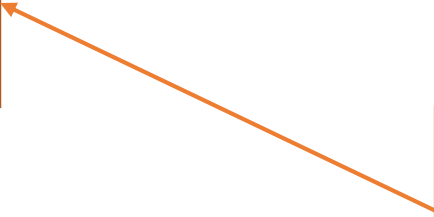
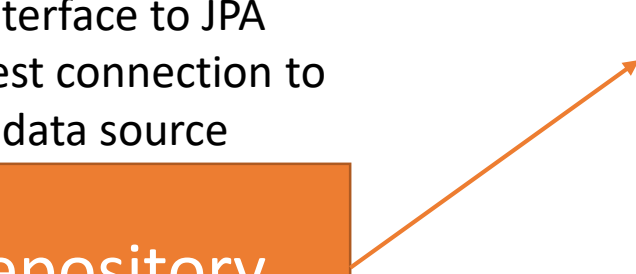
Architecture



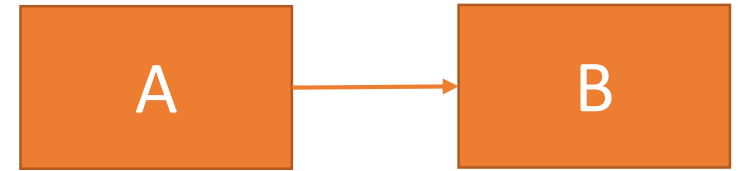
-  Must be implemented for HW10
-  May be implemented for HW10



Not part of the Spring application



Implementing an architecture



Each **module** is a Java class

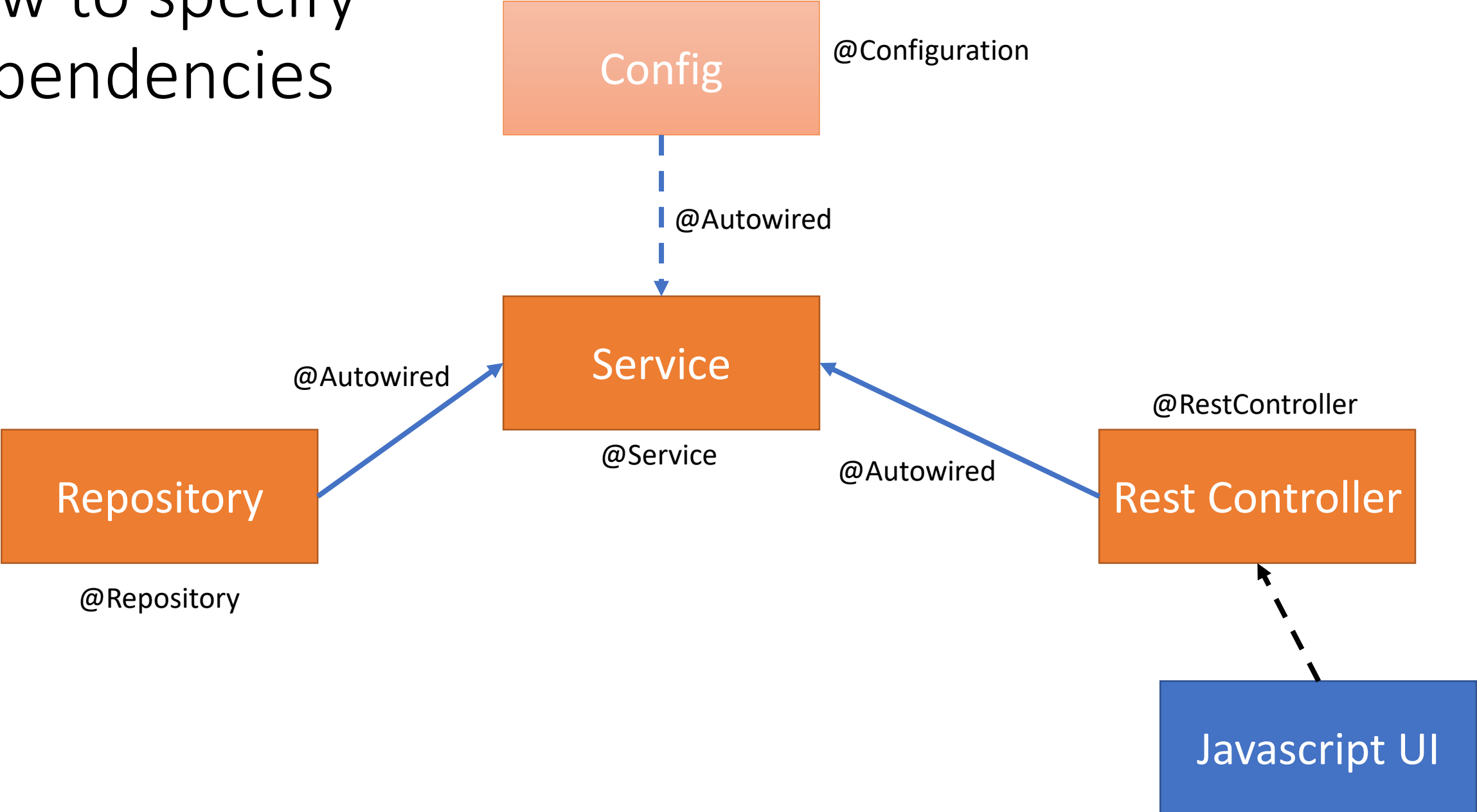
In an ordinary application, each **arrow** $A \rightarrow B$ represents:

- A has a field of type B
 - You need to set it
- A has a parameter or return of type B
 - You need to make the call

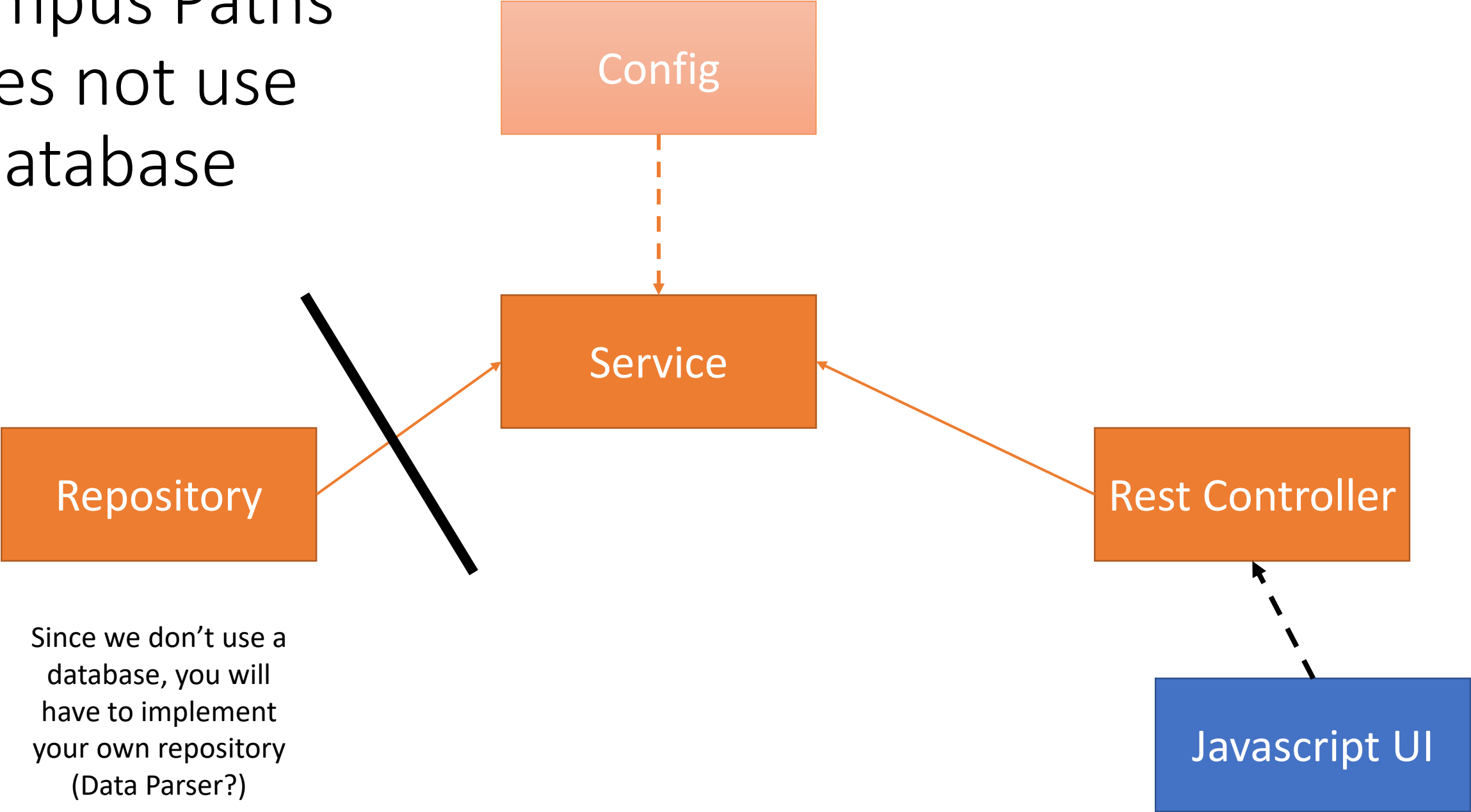
In Spring, you write **annotations**

- Spring finds the appropriate objects, sets fields, and makes calls for you

How to specify dependencies



Campus Paths
does not use
a database



Since we don't use a
database, you will
have to implement
your own repository
(Data Parser?)