Spring Boot Input Files

https://www.facebook.com/groups/thejavatemple/

=> If we are using Spring f/w, then Programmer has to
  a. Define Spring Configuration code (XML/Java..)
  b. Programmer has to give inputs to config code

=> Coming to Spring boot, it takes care of Define Spring Configuration code
  (AutoConfiguration)
  But here, programmer you need to provide inputs

=> Inputs?? 2 files (key=val)
  a. application.properties
  b. application.yml

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https://docs.spring.io/spring-boot/docs/current/reference/html
/appendix-application-properties.html#transaction-properties

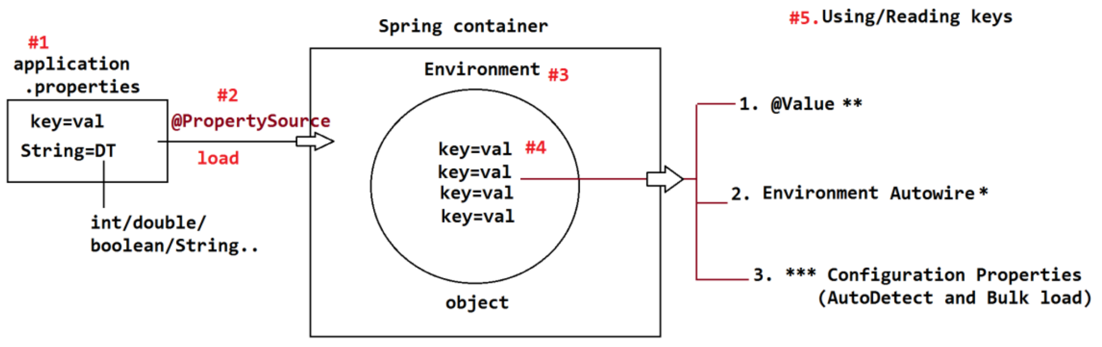
** To load properties file into Spring container code in Spring f/w
  @PropertySource("classpath:application.properties").
  In Spring boot also same code but written by boot only.

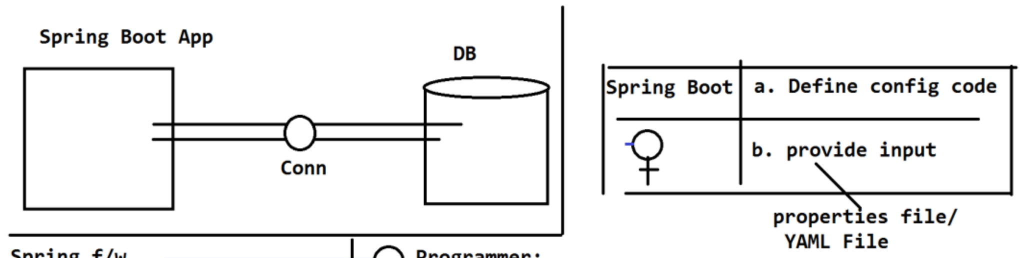
Note:
a. all keys must be placed inside application.properties which is under
   src/main/resources(classpath)
b. key is String type, value can be any type like int/double/string/boolean..etc
c. Properties file is loaded by using code like:
   @PropertySource("classpath:application.properties") by Spring boot only.

d. Spring container creates object to Environment(I) where Impl class is
   StandardEnvironment(C) for normal programming. Unit Testing object is
   MockEnvironment(C).

e. To read these keys in our application, we use code types
   i. @Value

ii. Environment object autowired
iii. *** Configuration Properties(bulk load)





Spring f/w

DataSource (I)
⇧ IS-A
DriverManagerDataSource (C)
driverClassName, url,
username,password

Programmer:
a.Define Config code +
b. provide inputs

```
@Configuration
public class AppConfig{
   @Bean
   public DataSource ds(){
    DriverManagerDataSource ds=new DriverManagerDataSource();
    ds.setDriverClassName("oracle.jdbc.driver.OracleDriver");
    ds.setUrl("jdbc:oracle:thin:@localhost:1521:XE");
    ds.setUsername("admin");
    ds.setPassword("nit");
    return ds;
  }
}
```

Spring boot code: spring-boot-start-jdbc
inputs: application.properties (src/main/resources) (key=val)

```
# Comment Line
spring.datasource.driver-class-name= oracle.jdbc.driver.OracleDriver
spring.datasource.url= jdbc:oracle:thin:@localhost:1521:XE
spring.datasource.username= admin
spring.datasource.password= nit
```

Pre-defined keys

Programmer defined keys

------code----------------------
application.properties

```
#Hello from properties
app.title=SAMPLE ONE
app.version=1.0
app.active=true

Runner class code:
package in.nit.runner;

import org.springframework.beans.factory.annotation.Value;
import org.springframework.boot.CommandLineRunner;
import org.springframework.stereotype.Component;

@Component
public class InputReadRunner
     implements CommandLineRunner
{

     //@Value("${key}")
     @Value("${app.title}")
     private String ttle;
     @Value("${app.version}")
     private double ver;
     @Value("${app.active}")
     private boolean active;


     @Override
     public void run(String... args) throws Exception {
          System.out.println("from runner:  " + ttle +"-
"+ver+"-"+active);
     }
}
```