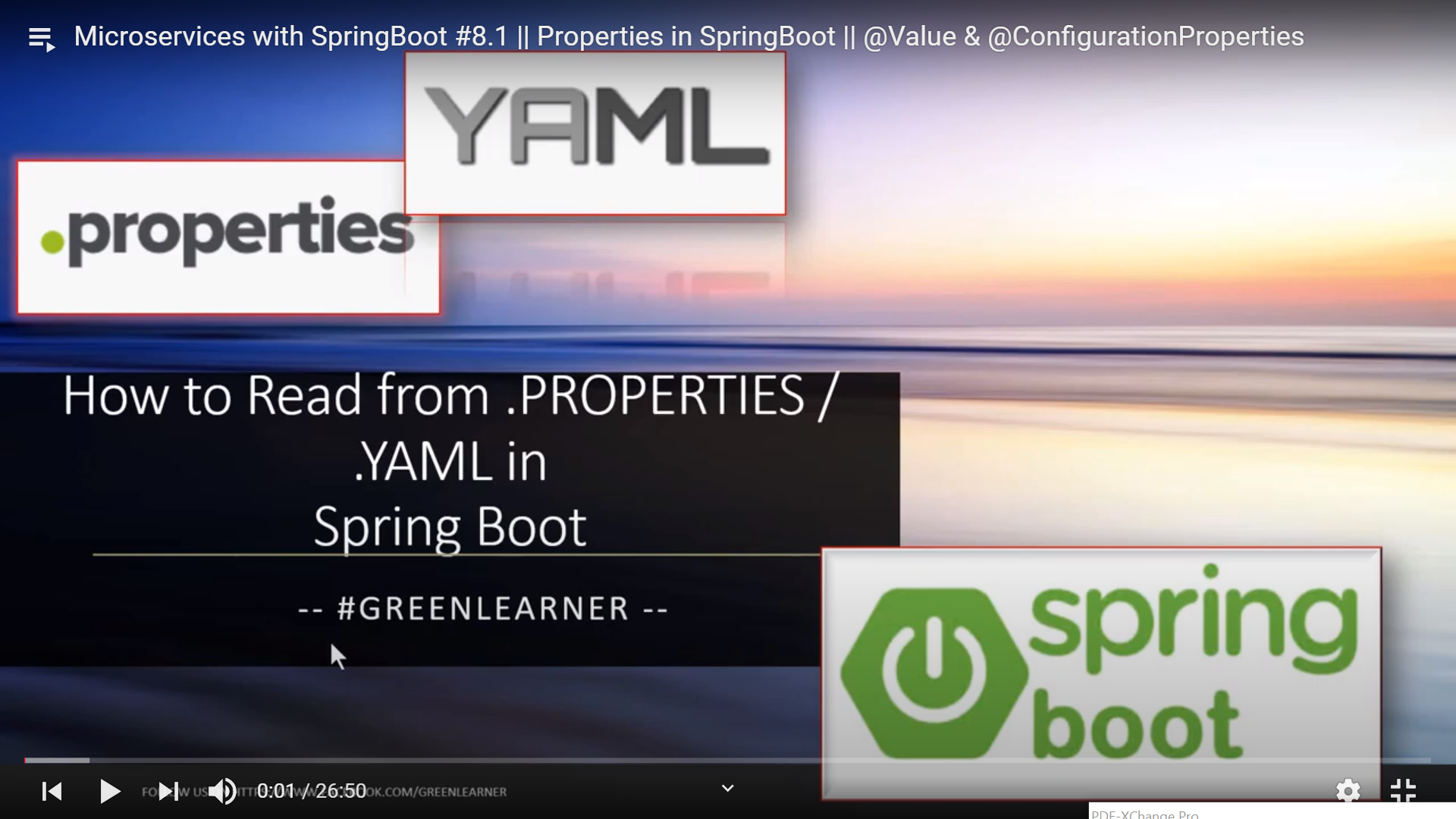
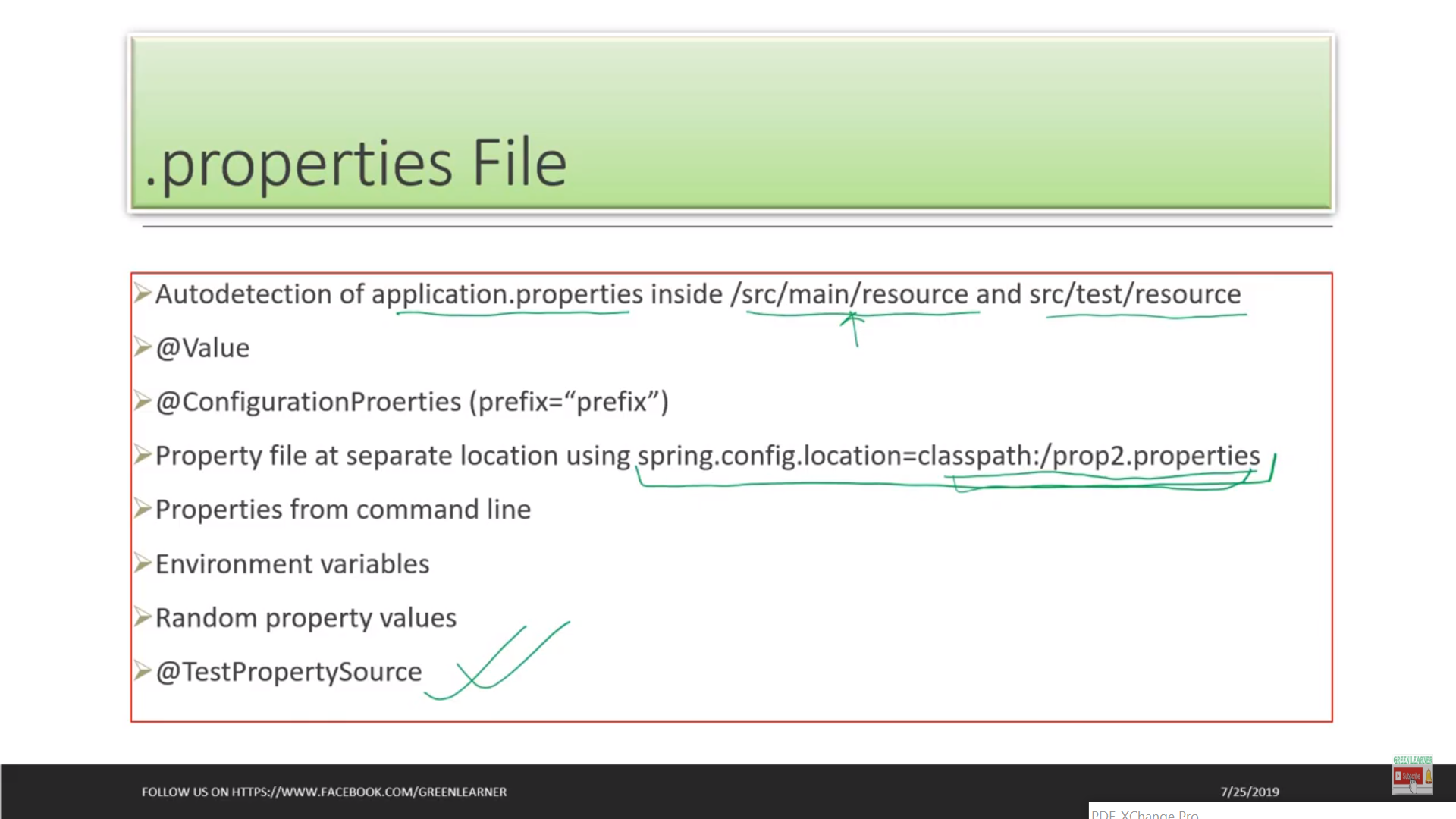
# Properties in SpringBoot || @Value & @ConfigurationProperties



Properties are used to externalize the application…means u can change the configuration without touching the code…

These files are autodetected and loaded to app… 

@Configuration annotation req so the springboot get configure the user bean and map to corresponding value…

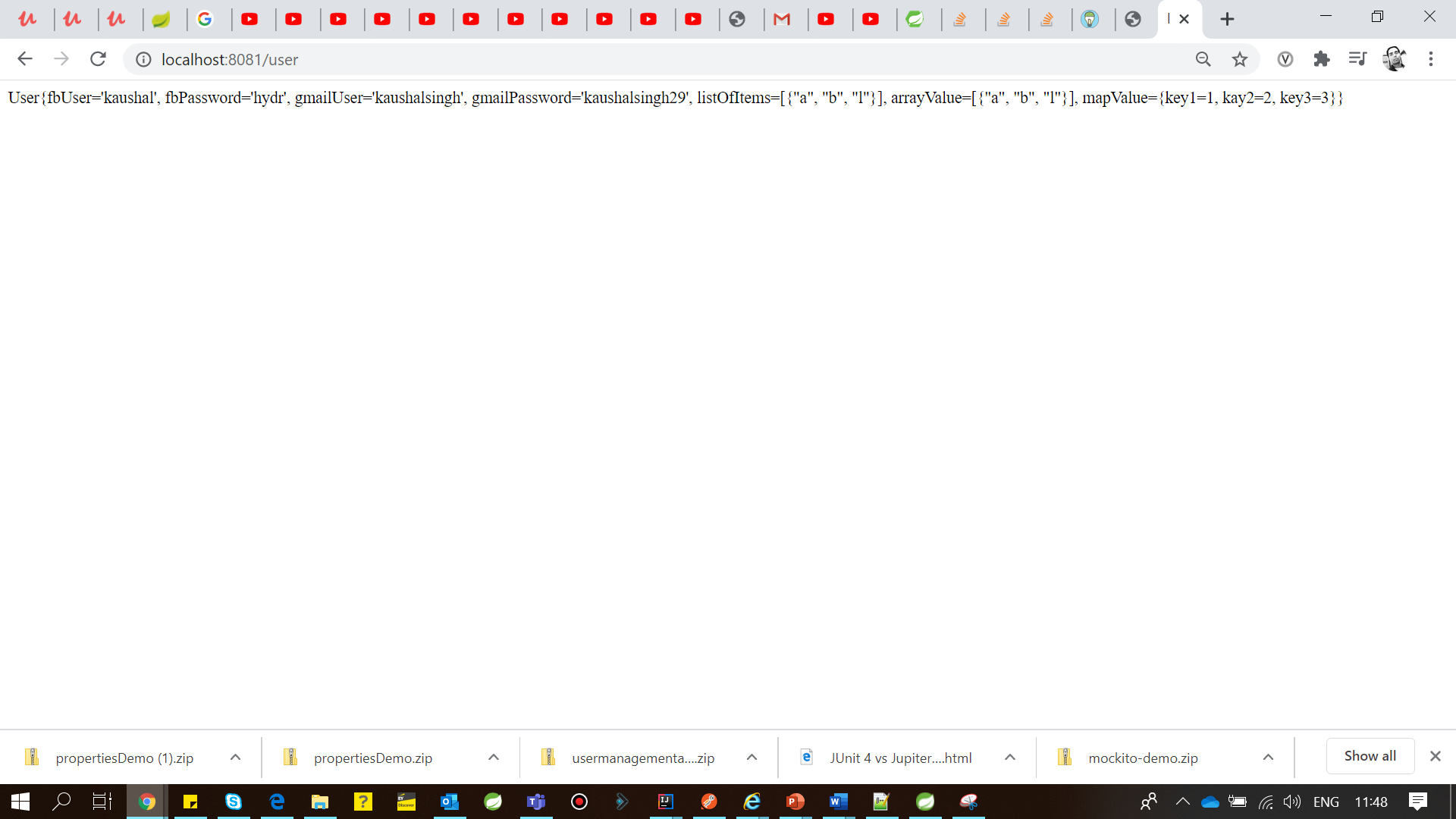
parse this Spring Bean and get the value…

if it won’t read value from application.properties the use colon : to provide default value…

server.port=8081  
spring.application.name=properties Demo  
  
  
user.fb.name=kaushal  
#user.fb.password=kaushal29  
user.gmail.name=kaushalsingh  
user.gmail.password=kaushalsingh29  
  
values.map={key1:'1', kay2:'2', key3:'3'}  
list={"a","b","l"}

package com.alwayslearning.propertiesDemo;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
  
@RestController  
public class MainController  
{  
 @Autowired  
 User user;  
 @GetMapping("/user")  
 public String getUsers()  
 {  
 //System.out.println(user.getSystemProps());  
 return user.toString();  
 }  
}

package com.alwayslearning.propertiesDemo;  
import org.springframework.beans.factory.annotation.Value;  
import org.springframework.context.annotation.Configuration;  
import org.springframework.context.annotation.PropertySource;  
import org.springframework.context.annotation.PropertySources;  
  
import java.util.List;  
import java.util.Map;  
  
@Configuration  
public class User  
{  
 @Value("${user.fb.name}")  
 private String fbUser;  
  
 @Value("${user.fb.password:hydr}")  
 private String fbPassword;  
  
 @Value("${user.gmail.name}")  
 private String gmailUser;  
  
 @Value("${user.gmail.password}")  
 private String gmailPassword;  
  
 @Value("#{'${list}'.split(',')}")  
 private List<String> listOfItems;  
  
 @Value("${list}")  
 private List<String> arrayValue;  
  
 @Value("#{${values.map}}")  
 private Map<String,Integer> mapValue;  
  
// @Value("${SystemProperties}")  
// private Map<String,String> systemProps;  
//  
// public Map<String, String> getSystemProps() {  
// return systemProps;  
// }  
//  
// public void setSystemProps(Map<String, String> systemProps) {  
// this.systemProps = systemProps;  
// }  
  
 public String getFbUser() {  
 return fbUser;  
 }  
  
 public void setFbUser(String fbUser) {  
 this.fbUser = fbUser;  
 }  
  
 public String getFbPassword() {  
 return fbPassword;  
 }  
  
 public void setFbPassword(String fbPassword) {  
 this.fbPassword = fbPassword;  
 }  
  
 public String getGmailUser() {  
 return gmailUser;  
 }  
  
 public void setGmailUser(String gmailUser) {  
 this.gmailUser = gmailUser;  
 }  
  
 public String getGmailPassword() {  
 return gmailPassword;  
 }  
  
 public void setGmailPassword(String gmailPassword) {  
 this.gmailPassword = gmailPassword;  
 }  
  
 public List<String> getListOfItems() {  
 return listOfItems;  
 }  
  
 public void setListOfItems(List<String> listOfItems) {  
 this.listOfItems = listOfItems;  
 }  
  
 public List<String> getArrayValue() {  
 return arrayValue;  
 }  
  
 public void setArrayValue(List<String> arrayValue) {  
 this.arrayValue = arrayValue;  
 }  
  
 public Map<String, Integer> getMapValue() {  
 return mapValue;  
 }  
  
 public void setMapValue(Map<String, Integer> mapValue) {  
 this.mapValue = mapValue;  
 }  
  
 @Override  
 public String toString() {  
 return "User{" +  
 "fbUser='" + fbUser + '\'' +  
 ", fbPassword='" + fbPassword + '\'' +  
 ", gmailUser='" + gmailUser + '\'' +  
 ", gmailPassword='" + gmailPassword + '\'' +  
 ", listOfItems=" + listOfItems +  
 ", arrayValue=" + arrayValue +  
 ", mapValue=" + mapValue +  
 '}';  
 }  
}

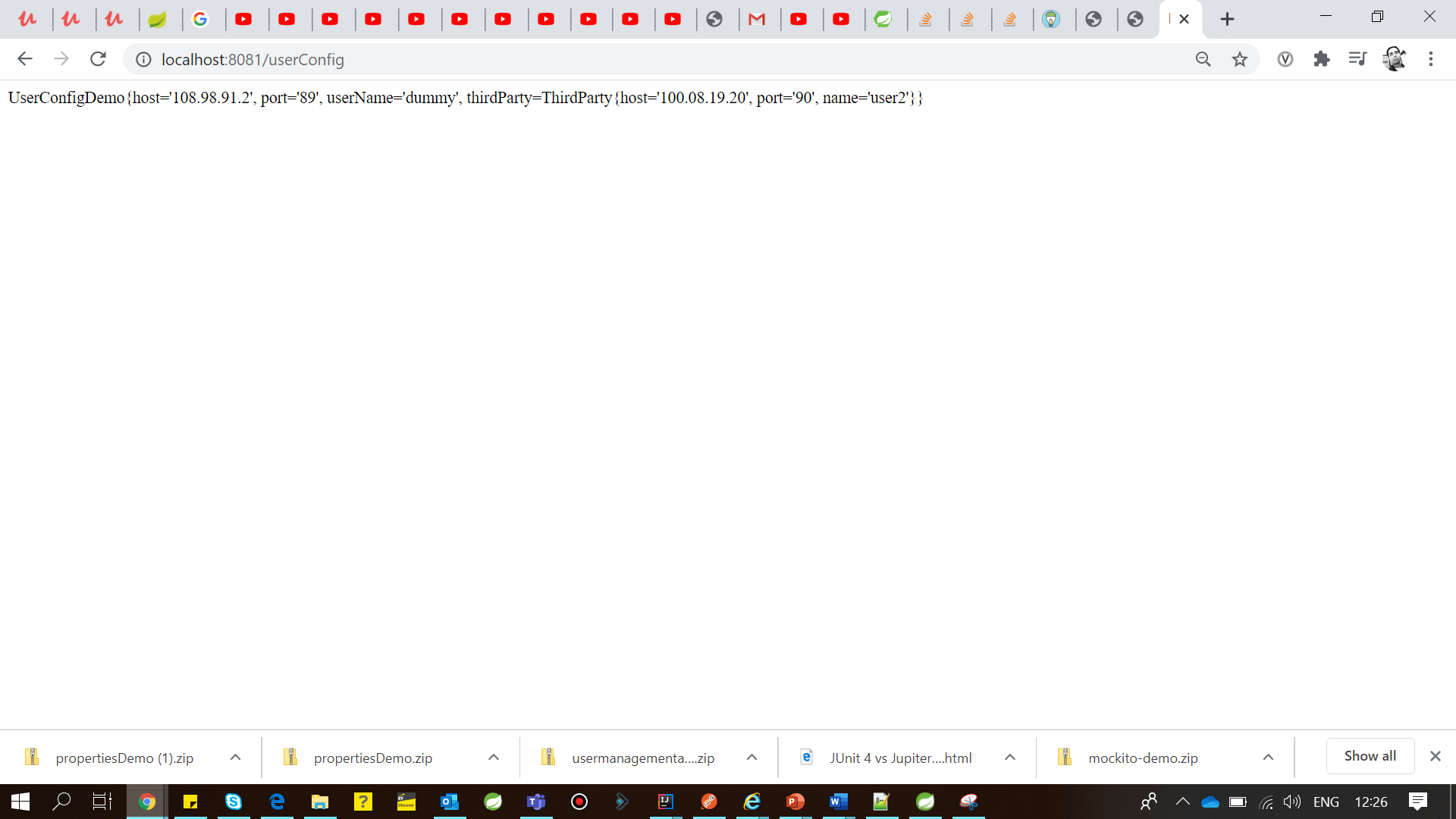


**For nested config :-**

package com.alwayslearning.propertiesDemo;  
  
import org.springframework.boot.context.properties.ConfigurationProperties;  
import org.springframework.context.annotation.Configuration;  
  
@Configuration  
@ConfigurationProperties(prefix = "config")  
public class UserConfigDemo  
{  
 private String host;  
 private String port;  
 private String userName;  
 private ThirdParty thirdParty;  
  
 public String getHost() {  
 return host;  
 }  
  
 public void setHost(String host) {  
 this.host = host;  
 }  
  
 public String getPort() {  
 return port;  
 }  
  
 public void setPort(String port) {  
 this.port = port;  
 }  
  
 public String getUserName() {  
 return userName;  
 }  
  
 public void setUserName(String userName) {  
 this.userName = userName;  
 }  
  
 public ThirdParty getThirdParty() {  
 return thirdParty;  
 }  
  
 public void setThirdParty(ThirdParty thirdParty) {  
 this.thirdParty = thirdParty;  
 }  
  
 @Override  
 public String toString() {  
 return "UserConfigDemo{" +  
 "host='" + host + '\'' +  
 ", port='" + port + '\'' +  
 ", userName='" + userName + '\'' +  
 ", thirdParty=" + thirdParty +  
 '}';  
 }  
  
  
  
 private static class ThirdParty  
 {  
 private String host;  
 private String port;  
 private String name;  
  
 public String getHost() {  
 return host;  
 }  
  
 public void setHost(String host) {  
 this.host = host;  
 }  
  
 public String getPort() {  
 return port;  
 }  
  
 public void setPort(String port) {  
 this.port = port;  
 }  
  
  
 public String getName() {  
 return name;  
 }  
  
 public void setName(String name) {  
 this.name = name;  
 }  
  
 @Override  
 public String toString() {  
 return "ThirdParty{" +  
 "host='" + host + '\'' +  
 ", port='" + port + '\'' +  
 ", name='" + name + '\'' +  
 '}';  
 }  
 }  
}

server.port=8081  
spring.application.name=properties Demo  
user.fb.name=kaushal  
#user.fb.password=kaushal29  
user.gmail.name=kaushalsingh  
user.gmail.password=kaushalsingh29  
  
values.map={key1:'1', kay2:'2', key3:'3'}  
list={"a","b","l"}  
  
config.host=108.98.91.2  
config.port=89  
config.userName=dummy  
config.thirdParty.host=100.08.19.20  
config.thirdParty.port=90  
config.thirdParty.name=user2

package com.alwayslearning.propertiesDemo;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.context.annotation.PropertySource;  
import org.springframework.context.annotation.PropertySources;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
  
@RestController  
public class MainController  
{  
 @Autowired  
 User user;  
  
 @Autowired  
 UserConfigDemo userConfigDemo;  
  
 @GetMapping("/user")  
 public String getUsers()  
 {  
 //System.out.println(user.getSystemProps());  
 return user.toString();  
 }  
  
 @GetMapping("/userConfig")  
 public String getUserConfig()  
 {  
 return userConfigDemo.toString();  
 }  
}



**Properties from Command Line:-**

So first we need to create the jar file….in intellij terminal…

Go to terminal

C:\GIT\_REPO\usermanagementapp\build\libs>gradlew clean build -xTest

C:\GIT\_REPO\usermanagementapp\build\libs>cd build/libs

C:\GIT\_REPO\usermanagementapp\build\libs>dir

Directory of C:\GIT\_REPO\usermanagementapp\build\libs

06-07-2020 12:34 <DIR> .

06-07-2020 12:34 <DIR> ..

06-07-2020 12:34 32,843,400 usermanagementapp-0.0.1-SNAPSHOT.jar

1 File(s) 32,843,400 bytes

2 Dir(s) 200,793,845,760 bytes free

C:\GIT\_REPO\usermanagementapp\build\libs>java -jar usermanagementapp-0.0.1-SNAPSHOT.jar

Previously port was 8081…now I want to change to 8083…

Where -D is the switch…

To run server---

C:\GIT\_REPO\usermanagementapp\build\libs>java -jar -Dserver.port=8083 usermanagementapp-0.0.1-SNAPSHOT.jar

2020-07-06 12:44:03.904 INFO 35132 --- [ main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8083 (http) with context

path ''

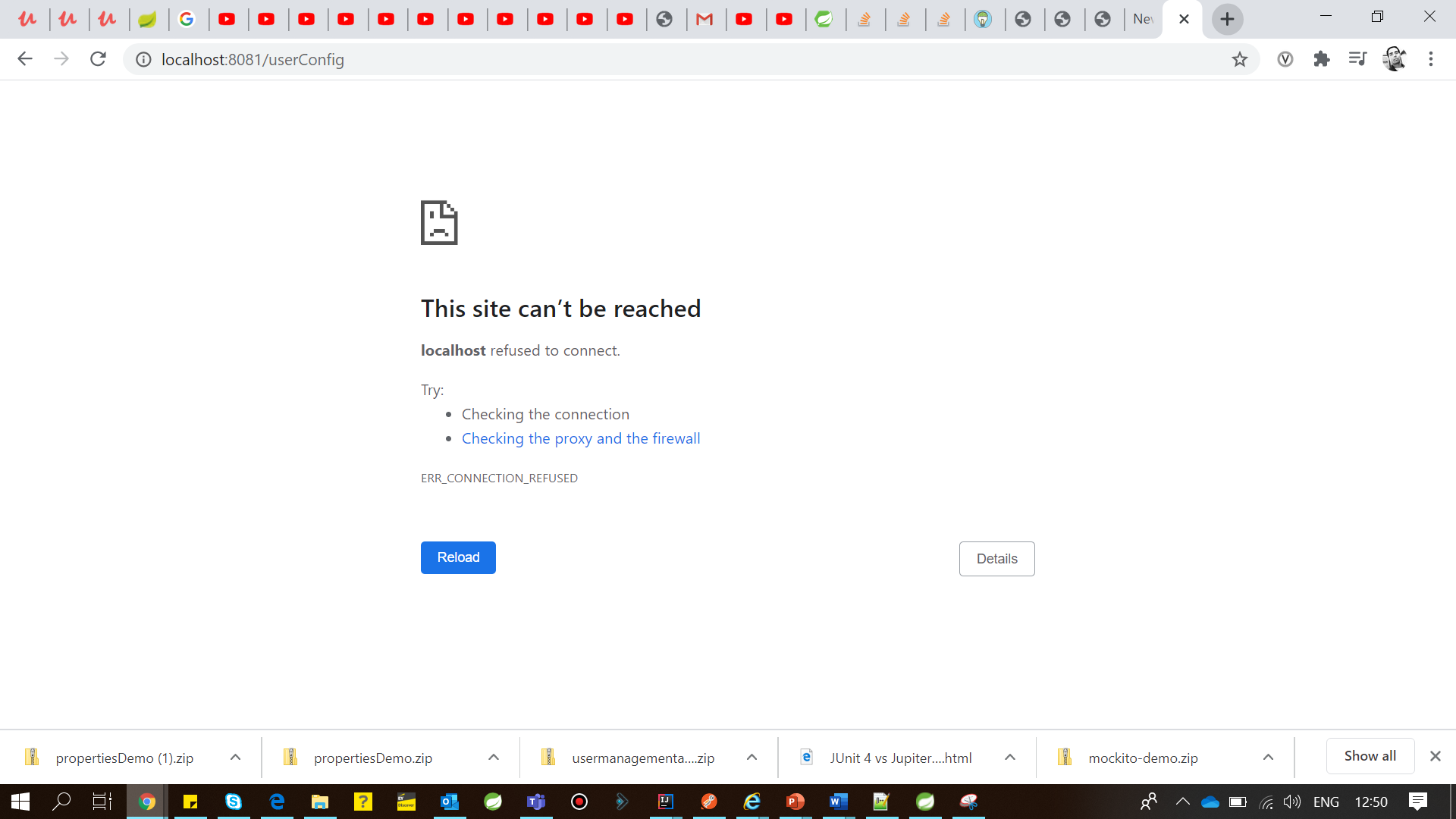
2020-07-06 12:44:03.906 INFO 35132 --- [ main] d.s.w.p.DocumentationPluginsBootstrapper : Context refreshed

2020-07-06 12:44:04.011 INFO 35132 --- [ main] d.s.w.p.DocumentationPluginsBootstrapper : Found 1 custom documentation plugin(s)

2020-07-06 12:44:04.583 INFO 35132 --- [ main] s.d.s.w.s.ApiListingReferenceScanner : Scanning for api listing references

2020-07-06 12:44:05.171 INFO 35132 --- [ main] c.a.l.u.UsermanagementappApplication : Started UsermanagementappApplication in 24.836 seco

nds (JVM running for 28.405)



Same like we change port we can change other property also…we can pass multiple property also…

C:\GIT\_REPO\usermanagementapp\build\libs>java -jar -Dserver.port=8083 -Dconfig.port=99 usermanagementapp-0.0.1-SNAPSHOT.jar