MicroProfile Config

MicroProfile Config API can be used to retrieve configuration information from different sources.

When we generated our Maven project we got an empty microprofile-config.properties file created in the src/main/resources package. MicroProfile Config files are created in this package as default. We will now add new properties and make our application read the properties from our config file. Open microprofile-config.properties file and add the following.

```
username=root
password=secret
microprofile.apis={"config", "cdi", "jax-rs", "json-p", "fault tolerance", "healt
check", "jwt auth", "metrics", "openapi", "opentracing", "rest client"}
```

Now open the BookStoreEndpoint.java and make it look like this:

```
@ApplicationScoped
@Path("/books")
public class BookStoreEndpoint {

    @Inject
    @ConfigProperty(name="username", defaultValue="admin")
    private String username;

@GET
    @Path("mp-config")
    @Produces(MediaType.APPLICATION_JSON)
public Response mpConfig() {
        Map<String, Object> configProperties = new HashMap<>();
        configProperties.put("username", username);
        return Response.ok(configProperties).build();
    }
}
```

<code>@Inject @ConfigProperty</code> is used for injecting a single configuration property. We could also use <code>@Inject Config</code> and use <code>getValue</code> to retrieve configuration properties like this:

```
@ApplicationScoped
@Path("/books")
public class BookStoreEndpoint {
    @Inject
    @ConfigProperty(name="username", defaultValue="admin")
    private String username;
    @Inject
    Config config;
    @GET
    @Path("mp-config")
    @Produces(MediaType.APPLICATION_JSON)
    public Response mpConfig() {
        Map<String, Object> configProperties = new HashMap<>();
        configProperties.put("username", username);
        configProperties.put("password", config.getValue("password", String.class));
        configProperties.put("microprofile-apis", config.getValue("microprofile.apis",
String[].class));
        return Response.ok(configProperties).build();
   }
}
```

Start the BookStoreClient service if not already started and type the following in a new terminal windows:

```
curl -i -H "Accept: application/json" -H "Content-Type: application/json" -X GET
http://localhost:8081/restapi/books/mp-config
```

Output

```
{"password":"secret","microprofile-apis":["{\"config\"","\"cdi\"","\"jax-rs\"","\"json-p\"","\"fault tolerance\"","\"healt check\"","\"jwt auth\"","\"metrics\"","\"openapi\"","\"opentracing\"","\"rest client\"}"],"username":"root"}%
```

Summary

In this chapter, we learned how to use MicroProfile Config API.