

Spring Boot Token based Authentication with Spring Security & JWT

>Last modified: March 28, 2022 (<https://www.bezkoder.com/spring-boot-jwt-authentication/>)   [bezkoder](https://www.bezkoder.com/author/bezkoder/) (<https://www.bezkoder.com/author/bezkoder/>) [Security](#) (<https://www.bezkoder.com/category/security/>), [Spring](#) (<https://www.bezkoder.com/category/spring/>)

In this tutorial, we're gonna build a Spring Boot Application that supports Token based Authentication with JWT. You'll know:

- Appropriate Flow for User Signup & User Login with JWT Authentication
- Spring Boot Application Architecture with Spring Security
- How to configure Spring Security to work with JWT
- How to define Data Models and association for Authentication and Authorization
- Way to use Spring Data JPA to interact with PostgreSQL/MySQL Database

Lots of interesting things ahead, let's explore together.

- Related Posts:

- Spring Boot Refresh Token with JWT example (<https://bezkoder.com/spring-boot-refresh-token-jwt/>)
- Spring Boot, Spring Data JPA – Building Rest CRUD API example (<https://bezkoder.com/spring-boot-jpa-crud-rest-api/>)
- Spring Boot File upload example with Multipart File (<https://bezkoder.com/spring-boot-file-upload/>)
- @RestControllerAdvice example in Spring Boot (<https://bezkoder.com/spring-boot-restcontrolleradvice/>)
- Spring Boot @ControllerAdvice & @ExceptionHandler example (<https://bezkoder.com/spring-boot-controlleradvice-exceptionhandler/>)
- @DataJpaTest example for Spring Data Repository Unit Test (<https://bezkoder.com/spring-boot-unit-test-jpa-repo-datajpatest/>)
- Spring Boot Unit Test for Rest Controller (<https://www.bezkoder.com/spring-boot-webmvctest/>)

- Using MongoDB: Spring Boot JWT Authentication with Spring Security and MongoDB (<https://bezkoder.com/spring-boot-jwt-auth-mongodb/>)

- Fullstack:

- Spring Boot + Vuejs: JWT Authentication Example (<https://bezkoder.com/spring-boot-vue-js-authentication-jwt-spring-security/>)



- Spring Boot + Angular 8: JWT Authentication Example
(<https://bezkoder.com/angular-spring-boot-jwt-auth/>)
- Spring Boot + Angular 10: JWT Authentication Example
(<https://bezkoder.com/angular-10-spring-boot-jwt-auth/>)
- Spring Boot + Angular 11: JWT Authentication Example
(<https://bezkoder.com/angular-11-spring-boot-jwt-auth/>)
- Spring Boot + Angular 12: JWT Authentication example
(<https://www.bezkoder.com/angular-12-spring-boot-jwt-auth/>)
- Spring Boot + React.js: JWT Authentication example (<https://bezkoder.com/spring-boot-react-jwt-auth/>)

Deployment:

- Deploy Spring Boot App on AWS – Elastic Beanstalk
(<https://www.bezkoder.com/deploy-spring-boot-aws-eb/>)
- Docker Compose: Spring Boot and MySQL example
(<https://www.bezkoder.com/docker-compose-spring-boot-mysql/>)

The example that uses HttpOnly Cookies instead (<https://www.bezkoder.com/spring-boot-login-example-mysql/>).

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Overview of Spring Boot JWT Authentication example

We will build a Spring Boot application in that:

- User can signup new account, or login with username & password.
- By User's role (admin, moderator, user), we authorize the User to access resources

This is our Spring Boot application demo running with MySQL database and test Rest Apis with Postman.

Spring Boot + JWT + MySQL: To...



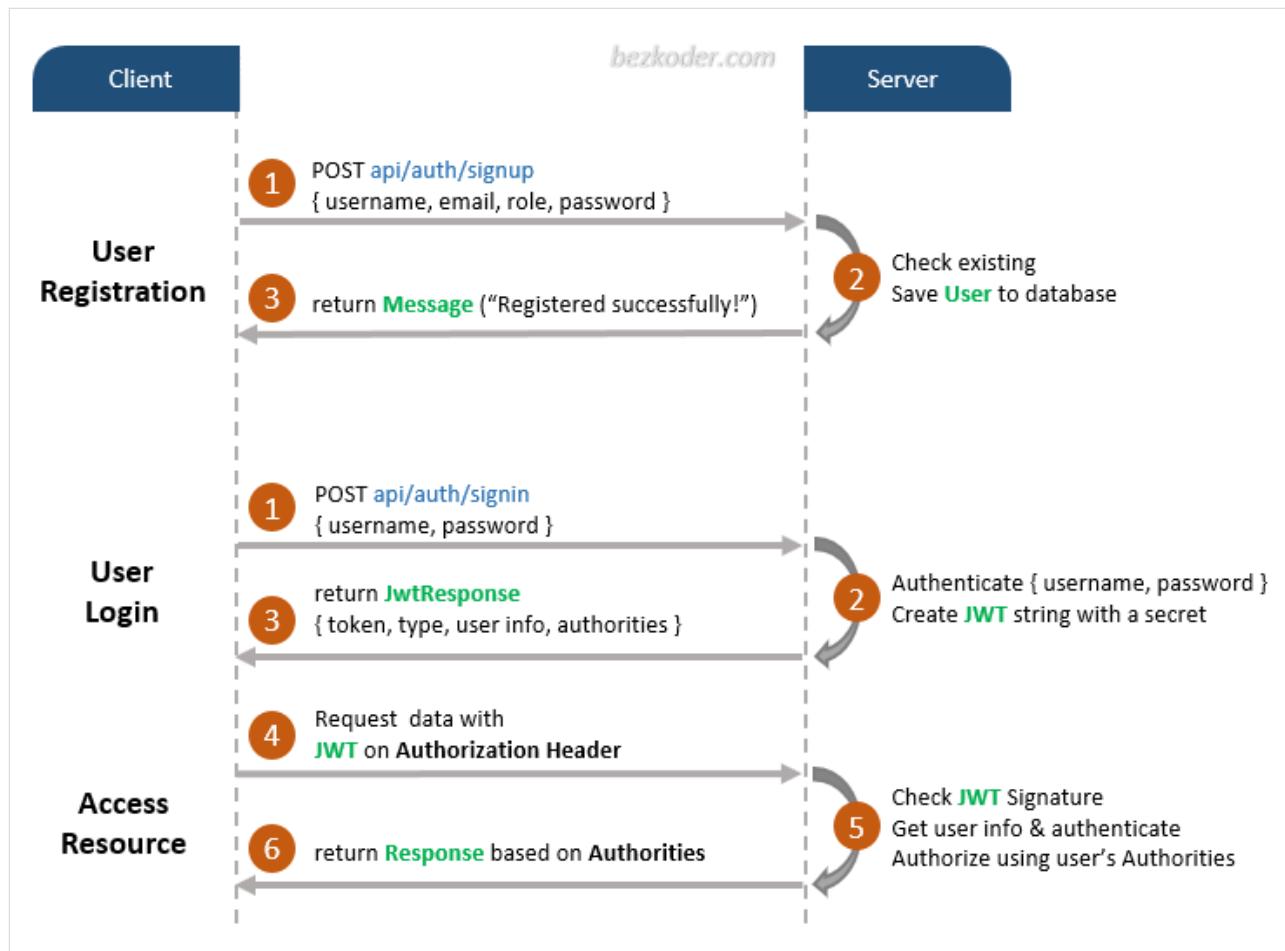
These are APIs that we need to provide:

Methods	Urls	Actions
POST	/api/auth/signup	signup new account
POST	/api/auth/signin	login an account
GET	/api/test/all	retrieve public content
GET	/api/test/user	access User's content
GET	/api/test/mod	access Moderator's content
GET	/api/test/admin	access Admin's content

The database we will use could be PostgreSQL or MySQL depending on the way we configure project dependency & datasource.

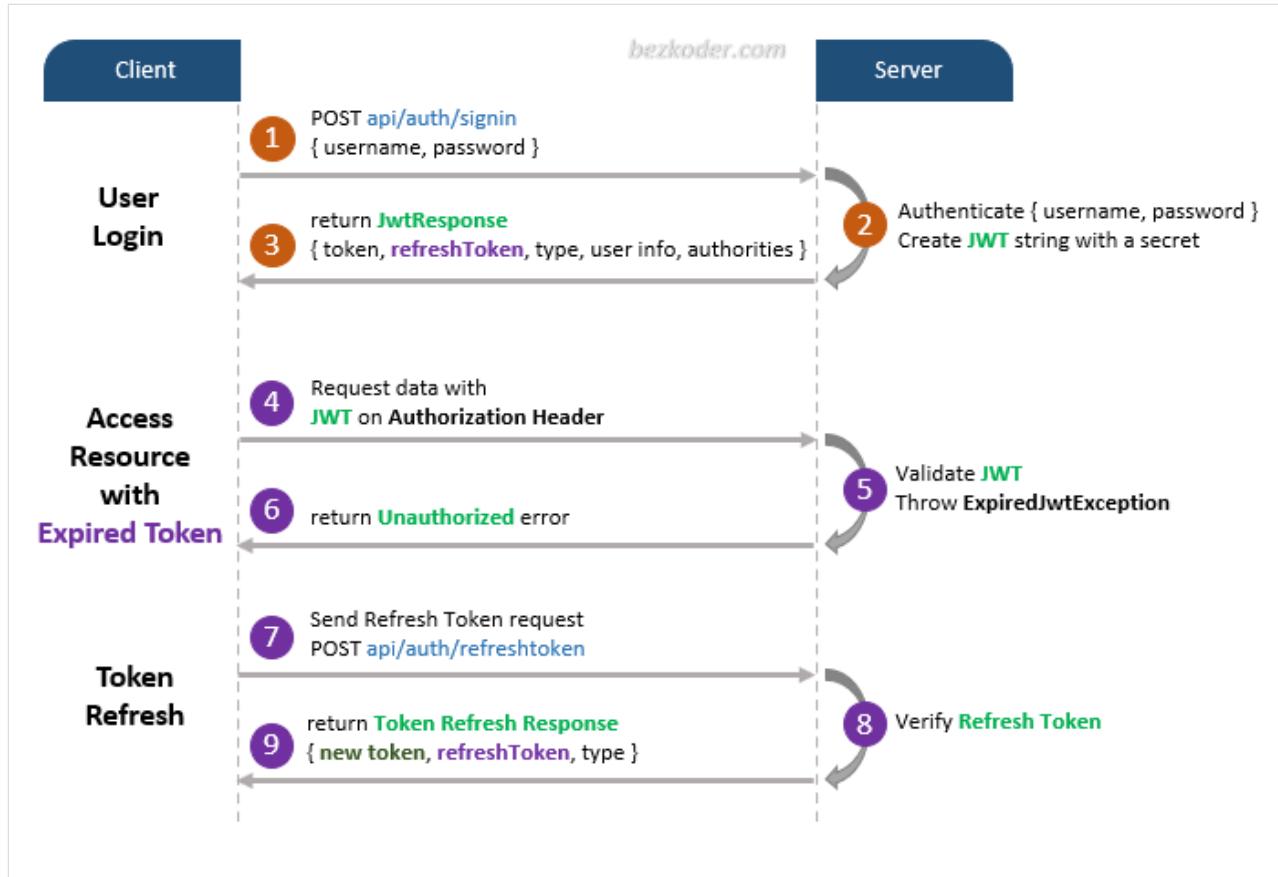
Spring Boot Signup & Login with JWT Authentication Flow

The diagram shows flow of how we implement User Registration, User Login and Authorization process.



A legal JWT must be added to HTTP Authorization Header if Client accesses protected resources.

You will need to implement Refresh Token:



More details at: Spring Boot Refresh Token with JWT example

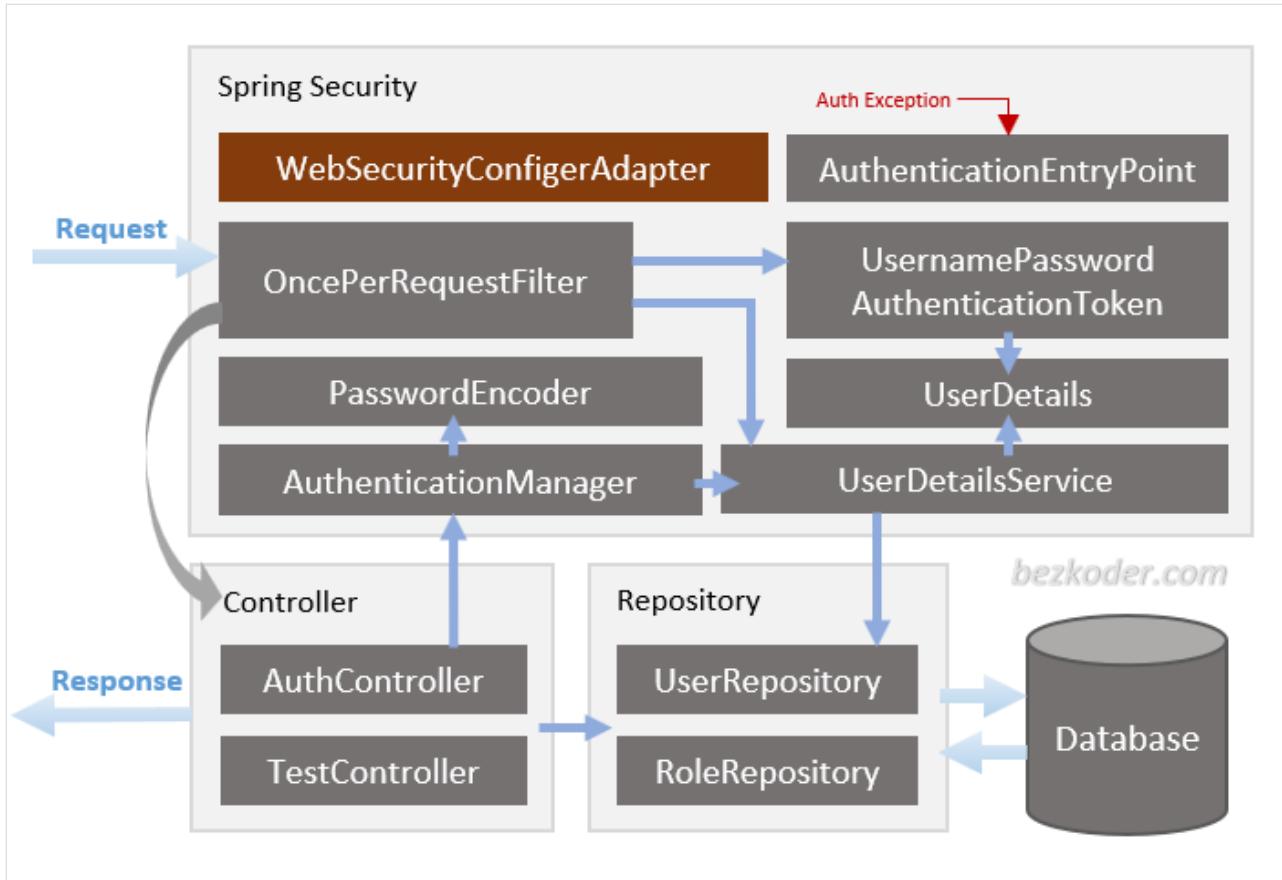
(<https://bezkoder.com/spring-boot-refresh-token-jwt/>)

You can also visit The example that uses HttpOnly Cookies instead

(<https://www.bezkoder.com/spring-boot-login-example-mysql/>).).

Spring Boot Server Architecture with Spring Security

You can have an overview of our Spring Boot Server with the diagram below:



Now I will explain it briefly.

Spring Security

- `WebSecurityConfigurerAdapter` (<https://docs.spring.io/spring-security/site/docs/current/api/org/springframework/security/config/annotation/web/configuration/WebSecurityConfigurerAdapter.html>) is the crux of our security implementation. It provides `HttpSecurity` (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/#jc-httpsecurity>) configurations to configure cors, csrf, session management, rules for protected resources. We can also extend and customize the default configuration that contains the elements below.
- `UserDetailsService` (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/#tech-userdetailsservice>) interface has a method to load User by *username* and returns a `UserDetails` object that Spring Security can use for authentication and validation.
- `UserDetails` contains necessary information (such as: `username`, `password`, `authorities`) to build an `Authentication` object.
- `UsernamePasswordAuthenticationToken` (<https://docs.spring.io/spring-security/site/docs/current/api/org/springframework/security/authentication/UsernamePasswordAuthenticationToken.html>) gets `{username, password}` from login Request, `AuthenticationManager` will use it to authenticate a login account.

- `AuthenticationManager` (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/#core-services-authentication-manager>) has a `DaoAuthenticationProvider` (with help of `UserDetailsService` & `PasswordEncoder`) to validate `UsernamePasswordAuthenticationToken` object. If successful, `AuthenticationManager` returns a fully populated `Authentication` object (including granted authorities).
- `OncePerRequestFilter` (<https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/web/filter/OncePerRequestFilter.html>) makes a single execution for each request to our API. It provides a `doFilterInternal()` method that we will implement parsing & validating JWT, loading User details (using `UserDetailsService`), checking Authorizaion (using `UsernamePasswordAuthenticationToken`).
- `AuthenticationEntryPoint` (<https://docs.spring.io/spring-security/site/docs/current/api/org/springframework/security/web/AuthenticationEntryPoint.html>) will catch authentication error.

Repository contains `UserRepository` & `RoleRepository` to work with Database, will be imported into **Controller**.

Controller receives and handles request after it was filtered by `OncePerRequestFilter`.

- `AuthController` handles signup/login requests
- `TestController` has accessing protected resource methods with role based validations.

Understand the architecture deeply and grasp the overview more easier:

Spring Boot Architecture for JWT with Spring Security (<https://bezkoder.com/spring-boot-jwt-mysql-spring-security-architecture/>)

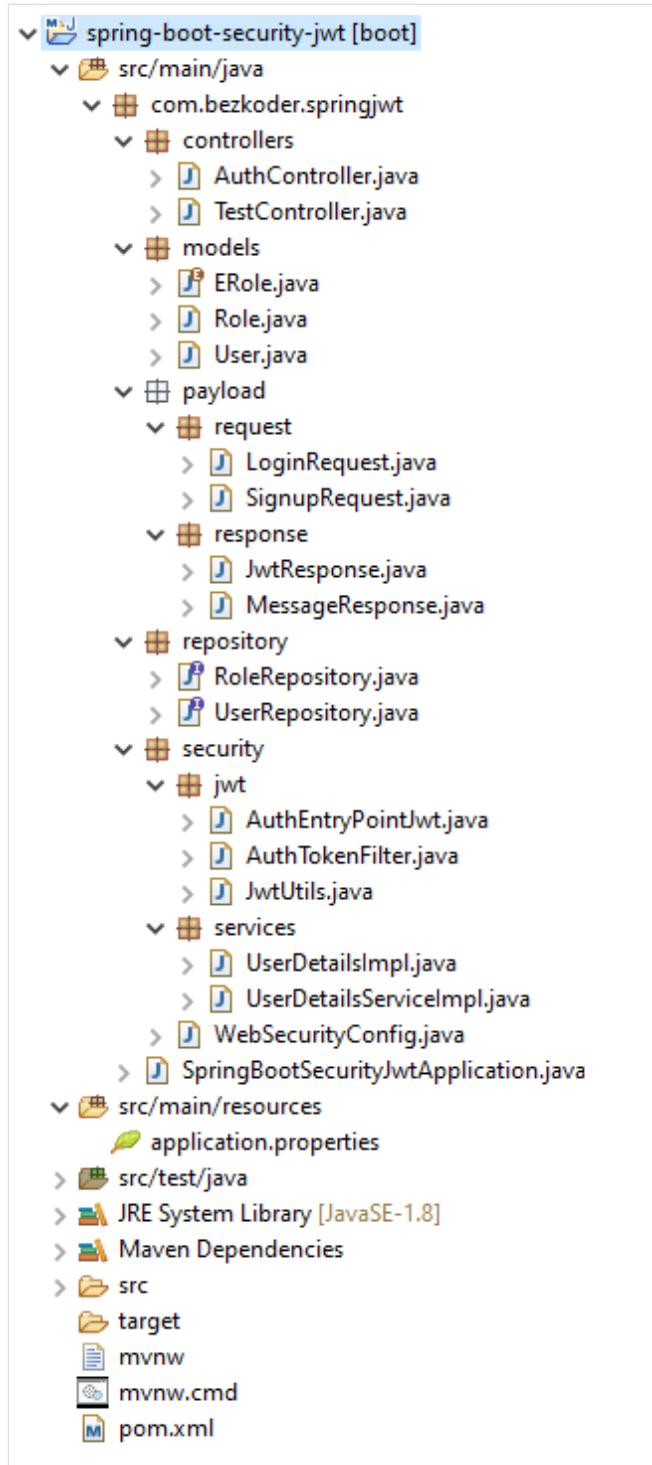
Technology

- Java 8
- Spring Boot 2.6.1 (with Spring Security, Spring Web, Spring Data JPA)
- jjwt 0.9.1
- PostgreSQL/MySQL
- Maven 3.6.1

Project Structure

This is folders & files structure for our Spring Boot application:





security: we configure Spring Security & implement Security Objects here.

- WebSecurityConfig extends WebSecurityConfigurerAdapter
- UserDetailsServiceImpl implements UserDetailsService
- UserDetailsImpl implements UserDetails
- AuthEntryPointJwt implements AuthenticationEntryPoint
- AuthTokenFilter extends OncePerRequestFilter
- JwtUtils provides methods for generating, parsing, validating JWT

controllers handle signup/login requests & authorized requests.

- AuthController : @PostMapping('/signin'), @PostMapping('/signup')
- TestController : @GetMapping('/api/test/all'), @GetMapping('/api/test/[role]')

repository has interfaces that extend `Spring Data JPA JpaRepository` to interact with Database.

- `UserRepository` extends `JpaRepository<User, Long>`
- `RoleRepository` extends `JpaRepository<Role, Long>`

models defines two main models for Authentication (`User`) & Authorization (`Role`).

They have many-to-many relationship.

- `User` : id, username, email, password, roles
- `Role` : id, name

payload defines classes for Request and Response objects

We also have **application.properties** for configuring Spring Datasource, Spring Data JPA and App properties (such as JWT Secret string or Token expiration time).

Setup new Spring Boot project

Use Spring web tool (<https://start.spring.io/>) or your development tool (Spring Tool Suite (<https://spring.io/tools>), Eclipse, IntelliJ (<https://www.jetbrains.com/idea/download/>)) to create a Spring Boot project.

Then open **pom.xml** and add these dependencies:

```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-data-jpa</artifactId>
</dependency>
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-security</artifactId>
</dependency>
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-web</artifactId>
</dependency>
<dependency>
    <groupId>io.jsonwebtoken</groupId>
    <artifactId>jjwt</artifactId>
    <version>0.9.1</version>
</dependency>
```

We also need to add one more dependency.

- If you want to use **PostgreSQL**:



```
<dependency>
    <groupId>org.postgresql</groupId>
    <artifactId>postgresql</artifactId>
    <scope>runtime</scope>
</dependency>
```

- or **MySQL** is your choice:

```
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <scope>runtime</scope>
</dependency>
```

Configure Spring Datasource, JPA, App properties

Under *src/main/resources* folder, open *application.properties*, add some new lines.

For PostgreSQL

```
spring.datasource.url= jdbc:postgresql://localhost:5432/testdb
spring.datasource.username= postgres
spring.datasource.password= 123
spring.jpa.properties.hibernate.jdbc.lob.non_contextual_creation= true
spring.jpa.properties.hibernate.dialect= org.hibernate.dialect.PostgreSQLDialect
# Hibernate ddl auto (create, create-drop, validate, update)
spring.jpa.hibernate.ddl-auto= update
# App Properties
bezkoder.app.jwtSecret= bezKoderSecretKey
bezkoder.app.jwtExpirationMs= 86400000
```

For MySQL

```
spring.datasource.url= jdbc:mysql://localhost:3306/testdb?useSSL=false
spring.datasource.username= root
spring.datasource.password= 123456
spring.jpa.properties.hibernate.dialect= org.hibernate.dialect.MySQL5InnoDBDialect
spring.jpa.hibernate.ddl-auto= update
# App Properties
bezkoder.app.jwtSecret= bezKoderSecretKey
bezkoder.app.jwtExpirationMs= 86400000
```

Create the models

We're gonna have 3 tables in database: **users**, **roles** and **user_roles** for many-to-many relationship.

Let's define these models.

In *models* package, create 3 files:

ERole enum in *ERole.java*.

In this example, we have 3 roles corresponding to 3 enum.

```
package com.bezkoder.springjwt.models;
public enum ERole {
    ROLE_USER,
    ROLE_MODERATOR,
    ROLE_ADMIN
}
```

Role model in *Role.java*

```
package com.bezkoder.springjwt.models;
import javax.persistence.*;
@Entity
@Table(name = "roles")
public class Role {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Integer id;
    @Enumerated(EnumType.STRING)
    @Column(length = 20)
    private ERole name;
    public Role() {
    }
    public Role(ERole name) {
        this.name = name;
    }
    public Integer getId() {
        return id;
    }
    public void setId(Integer id) {
        this.id = id;
    }
    public ERole getName() {
        return name;
    }
    public void setName(ERole name) {
        this.name = name;
    }
}
```



User model in *User.java*.

It has 5 fields: id, username, email, password, roles.



```
package com.bezkoder.springjwt.models;
import java.util.HashSet;
import java.util.Set;
import javax.persistence.*;
import javax.validation.constraints.Email;
import javax.validation.constraints.NotBlank;
import javax.validation.constraints.Size;
@Entity
@Table( name = "users",
        uniqueConstraints = {
            @UniqueConstraint(columnNames = "username"),
            @UniqueConstraint(columnNames = "email")
        })
public class User {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;
    @NotBlank
    @Size(max = 20)
    private String username;
    @NotBlank
    @Size(max = 50)
    @Email
    private String email;
    @NotBlank
    @Size(max = 120)
    private String password;
    @ManyToMany(fetch = FetchType.LAZY)
    @JoinTable( name = "user_roles",
                joinColumns = @JoinColumn(name = "user_id"),
                inverseJoinColumns = @JoinColumn(name = "role_id"))
    private Set<Role> roles = new HashSet<>();
    public User() {
    }
    public User(String username, String email, String password) {
        this.username = username;
        this.email = email;
        this.password = password;
    }
    public Long getId() {
        return id;
    }
    public void setId(Long id) {
        this.id = id;
    }
    public String getUsername() {
        return username;
    }
    public void setUsername(String username) {
```



```

        this.username = username;
    }
    public String getEmail() {
        return email;
    }
    public void setEmail(String email) {
        this.email = email;
    }
    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }
    public Set<Role> getRoles() {
        return roles;
    }
    public void setRoles(Set<Role> roles) {
        this.roles = roles;
    }
}

```

Implement Repositories

Now, each model above needs a repository for persisting and accessing data. In `repository` package, let's create 2 repositories.

UserRepository

There are 3 necessary methods that `JpaRepository` supports.

```

package com.bezkoder.springjwt.repository;
import java.util.Optional;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.bezkoder.springjwt.models.User;
@Repository
public interface UserRepository extends JpaRepository<User, Long> {
    Optional<User> findByUsername(String username);
    Boolean existsByUsername(String username);
    Boolean existsByEmail(String email);
}

```

RoleRepository

This repository also extends `JpaRepository` and provides a finder method.



```
package com.bezkoder.springjwt.repository;
import java.util.Optional;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.bezkoder.springjwt.models.ERole;
import com.bezkoder.springjwt.models.Role;
@Repository
public interface RoleRepository extends JpaRepository<Role, Long> {
    Optional<Role> findByName(ERole name);
}
```

Configure Spring Security

In *security* package, create `WebSecurityConfig` class that extends `WebSecurityConfigurerAdapter`.

WebSecurityConfig.java



```

package com.bezkoder.springjwt.security;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.security.authentication.AuthenticationManager;
import org.springframework.security.config.annotation.authentication.builders.AuthenticationManagerBuilder;
import org.springframework.security.config.annotation.method.configuration.EnableMethodSecurity;
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
import org.springframework.security.config.annotation.web.configuration.EnableWebSecurity;
import org.springframework.security.config.annotation.web.configuration.WebSecurityConfigurerAdapter;
import org.springframework.security.config.http.SessionCreationPolicy;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.security.web.authentication.UsernamePasswordAuthenticationFilter;
import com.bezkoder.springjwt.security.jwt.AuthEntryPointJwt;
import com.bezkoder.springjwt.security.jwt.AuthTokenFilter;
import com.bezkoder.springjwt.services.UserDetailsServiceImpl;
@Configuration
@EnableWebSecurity
@EnableGlobalMethodSecurity(
        // securedEnabled = true,
        // jsr250Enabled = true,
        prePostEnabled = true)
public class WebSecurityConfig extends WebSecurityConfigurerAdapter {
    @Autowired
    UserDetailsServiceImpl userDetailsService;
    @Autowired
    private AuthEntryPointJwt unauthorizedHandler;
    @Bean
    public AuthTokenFilter authenticationJwtTokenFilter() {
        return new AuthTokenFilter();
    }
    @Override
    public void configure(AuthenticationManagerBuilder authenticationManagerBuilder) throws Exception {
        authenticationManagerBuilder.userDetailsService(userDetailsService);
    }
    @Bean
    @Override
    public AuthenticationManager authenticationManagerBean() throws Exception {
        return super.authenticationManagerBean();
    }
    @Bean
    public PasswordEncoder passwordEncoder() {
        return new BCryptPasswordEncoder();
    }
    @Override
    protected void configure(HttpSecurity http) throws Exception {
        http.cors().and().csrf().disable()
            .exceptionHandling().authenticationEntryPoint(unauthorizedHandler)
            .and()
            .authorizeRequests()
                .antMatchers("/api/auth/**").permitAll()
                .anyRequest().authenticated()
            .and()
            .logout()
                .logoutSuccessUrl("/api/auth/logout");
    }
}

```

```
.sessionManagement().sessionCreationPolicy(SessionCreationPolicy.IF_REQUIRED)
.authorizeRequests().antMatchers("/api/auth/**").permitAll()
.antMatchers("/api/test/**").permitAll()
.anyRequest().authenticated();
http.addFilterBefore(authenticationJwtTokenFilter(), UsernamePasswordAuthenticationFilter.class);
}
```

Let me explain the code above.

- `@EnableWebSecurity` allows Spring to find and automatically apply the class to the global Web Security.
- `@EnableGlobalMethodSecurity` provides AOP security on methods. It enables `@PreAuthorize`, `@PostAuthorize`, it also supports JSR-250 (https://en.wikipedia.org/wiki/JSR_250). You can find more parameters in configuration in Method Security Expressions (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/#method-security-expressions>).
- We override the `configure(HttpSecurity http)` method from `WebSecurityConfigurerAdapter` interface. It tells Spring Security how we configure CORS and CSRF, when we want to require all users to be authenticated or not, which filter (`AuthTokenFilter`) and when we want it to work (filter before `UsernamePasswordAuthenticationFilter`), which Exception Handler is chosen (`AuthEntryPointJwt`).
- Spring Security will load User details to perform authentication & authorization. So it has `UserDetailsService` interface that we need to implement.
- The implementation of `UserDetailsService` will be used for configuring `DaoAuthenticationProvider` by `AuthenticationManagerBuilder.userDetailsService()` method.
- We also need a `PasswordEncoder` for the `DaoAuthenticationProvider`. If we don't specify, it will use plain text.

Implement UserDetails & UserDetailsService

If the authentication process is successful, we can get User's information such as username, password, authorities from an `Authentication` object.

```
Authentication authentication =  
    authenticationManager.authenticate(  
        new UsernamePasswordAuthenticationToken(username, password)  
    );  
UserDetails userDetails = (UserDetails) authentication.getPrincipal();  
// userDetails.getUsername()  
// userDetails.getPassword()  
// userDetails.getAuthorities()
```

If we want to get more data (id, email...), we can create an implementation of this `UserDetails` interface.

security/services/UserDetailsImpl.java



```
package com.bezkoder.springjwt.security.services;
import java.util.Collection;
import java.util.List;
import java.util.Objects;
import java.util.stream.Collectors;
import org.springframework.security.core.GrantedAuthority;
import org.springframework.security.core.authority.SimpleGrantedAuthority;
import org.springframework.security.core.userdetails.UserDetails;
import com.bezkoder.springjwt.models.User;
import com.fasterxml.jackson.annotation.JsonIgnore;
public class UserDetailsImpl implements UserDetails {
    private static final long serialVersionUID = 1L;
    private Long id;
    private String username;
    private String email;
    @JsonIgnore
    private String password;
    private Collection<? extends GrantedAuthority> authorities;
    public UserDetailsImpl(Long id, String username, String email, String p
        Collection<? extends GrantedAuthority> authorities) {
        this.id = id;
        this.username = username;
        this.email = email;
        this.password = password;
        this.authorities = authorities;
    }
    public static UserDetailsImpl build(User user) {
        List<GrantedAuthority> authorities = user.getRoles().stream()
            .map(role -> new SimpleGrantedAuthority(role.getName().name)
            .collect(Collectors.toList()));
        return new UserDetailsImpl(
            user.getId(),
            user.getUsername(),
            user.getEmail(),
            user.getPassword(),
            authorities);
    }
    @Override
    public Collection<? extends GrantedAuthority> getAuthorities() {
        return authorities;
    }
    public Long getId() {
        return id;
    }
    public String getEmail() {
        return email;
    }
    @Override
    public String getPassword() {
```

```

        return password;
    }
    @Override
    public String getUsername() {
        return username;
    }
    @Override
    public boolean isAccountNonExpired() {
        return true;
    }
    @Override
    public boolean isAccountNonLocked() {
        return true;
    }
    @Override
    public boolean isCredentialsNonExpired() {
        return true;
    }
    @Override
    public boolean isEnabled() {
        return true;
    }
    @Override
    public boolean equals(Object o) {
        if (this == o)
            return true;
        if (o == null || getClass() != o.getClass())
            return false;
        UserDetailsImpl user = (UserDetailsImpl) o;
        return Objects.equals(id, user.id);
    }
}

```

Look at the code above, you can notice that we convert `Set<Role>` into `List<GrantedAuthority>`. It is important to work with Spring Security and Authentication object later.

As I have said before, we need `UserDetailsService` for getting `UserDetails` object. You can look at `UserDetailsService` interface that has only one method:

```

public interface UserDetailsService {
    UserDetails loadUserByUsername(String username) throws UsernameNotFoundException
}

```

So we implement it and override `loadUserByUsername()` method.

security/services/UserDetailsServiceImpl.java

```
package com.bezkoder.springjwt.security.services;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.core.userdetails.UserDetails;
import org.springframework.security.core.userdetails.UserDetailsService;
import org.springframework.security.core.userdetails.UsernameNotFoundException;
import org.springframework.stereotype.Service;
import org.springframework.transaction.annotation.Transactional;

import com.bezkoder.springjwt.models.User;
import com.bezkoder.springjwt.repository.UserRepository;
@Service
public class UserDetailsServiceImpl implements UserDetailsService {
    @Autowired
    UserRepository userRepository;
    @Override
    @Transactional
    public UserDetails loadUserByUsername(String username) throws UsernameNotFoundException {
        User user = userRepository.findByUsername(username)
            .orElseThrow(() -> new UsernameNotFoundException("User Not Found for Username: " + username));
        return UserDetailsImpl.build(user);
    }
}
```

In the code above, we get full custom User object using `UserRepository`, then we build a `UserDetails` object using static `build()` method.

Filter the Requests

Let's define a filter that executes once per request. So we create `AuthTokenFilter` class that extends `OncePerRequestFilter` and override `doFilterInternal()` method.

security/jwt/AuthTokenFilter.java

```
package com.bezkoder.springjwt.security.jwt;
import java.io.IOException;
import javax.servlet.FilterChain;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.authentication.UsernamePasswordAuthenticationToken;
import org.springframework.security.core.context.SecurityContextHolder;
import org.springframework.security.core.userdetails.UserDetails;
import org.springframework.security.web.authentication.WebAuthenticationDetailsSource;
import org.springframework.util.StringUtils;
import org.springframework.web.filter.OncePerRequestFilter;
import com.bezkoder.springjwt.services.UserDetailsServiceImpl;
public class AuthTokenFilter extends OncePerRequestFilter {
    @Autowired
    private JwtUtils jwtUtils;
    @Autowired
    private UserDetailsServiceImpl userDetailsService;
    private static final Logger logger = LoggerFactory.getLogger(AuthTokenFilter.class);
    @Override
    protected void doFilterInternal(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        try {
            String jwt = parseJwt(request);
            if (jwt != null && jwtUtils.validateJwtToken(jwt)) {
                String username = jwtUtils.getUserNameFromJwtToken(jwt);
                UserDetails userDetails = userDetailsService.loadUserByUsername(username);
                UsernamePasswordAuthenticationToken authentication = new UsernamePasswordAuthenticationToken(
                        userDetails, null, userDetails.getAuthorities());
                authentication.setDetails(new WebAuthenticationDetailsSource() {
                    @Override
                    public void setAuthHeader(HttpServletRequest httpServletRequest) {
                        SecurityContextHolder.getContext().setAuthentication(authentication);
                    }
                });
                filterChain.doFilter(request, response);
            }
        } catch (Exception e) {
            logger.error("Cannot set user authentication: {}", e);
        }
    }
    private String parseJwt(HttpServletRequest request) {
        String headerAuth = request.getHeader("Authorization");
        if (StringUtils.hasText(headerAuth) && headerAuth.startsWith("Bearer")) {
            return headerAuth.substring(7, headerAuth.length());
        }
        return null;
    }
}
```



What we do inside `doFilterInternal()` :

- get JWT from the Authorization header (by removing Bearer prefix)
- if the request has JWT , validate it, parse username from it
- from username , get UserDetails to create an Authentication object
- set the current UserDetails in SecurityContext (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/#securitycontextholder-securitycontext-and-authentication-objects>) using `setAuthentication(authentication)` method.

After this, everytime you want to get UserDetails , just use SecurityContext like this:

```
UserDetails userDetailsService =  
    (UserDetails) SecurityContextHolder.getContext().getAuthentication().getDetails()  
// userDetailsService.getUsername()  
// userDetailsService.getPassword()  
// userDetailsService.getAuthorities()
```

Create JWT Utility class

This class has 3 funtions:

- generate a JWT from username, date, expiration, secret
- get username from JWT
- validate a JWT

security/jwt/JwtUtils.java

```

package com.bezkoder.springjwt.security.jwt;
import java.util.Date;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Value;
import org.springframework.core.Authentication;
import org.springframework.stereotype.Component;
import com.bezkoder.springjwt.services.UserDetailsImpl;
import io.jsonwebtoken.*;
@Component
public class JwtUtils {
    private static final Logger logger = LoggerFactory.getLogger(JwtUtils.class);
    @Value("${bezkoder.app.jwtSecret}")
    private String jwtSecret;
    @Value("${bezkoder.app.jwtExpirationMs}")
    private int jwtExpirationMs;
    public String generateJwtToken(Authentication authentication) {
        UserDetailsImpl userPrincipal = (UserDetailsImpl) authentication.getPrincipal();
        return Jwts.builder()
            .setSubject(userPrincipal.getUsername())
            .setIssuedAt(new Date())
            .setExpiration(new Date((new Date()).getTime() + jwtExpirationMs))
            .signWith(SignatureAlgorithm.HS512, jwtSecret)
            .compact();
    }
    public String getUserNameFromJwtToken(String token) {
        return Jwts.parser().setSigningKey(jwtSecret).parseClaimsJws(token).getSubject();
    }
    public boolean validateJwtToken(String authToken) {
        try {
            Jwts.parser().setSigningKey(jwtSecret).parseClaimsJws(authToken);
            return true;
        } catch (SignatureException e) {
            logger.error("Invalid JWT signature: {}", e.getMessage());
        } catch (MalformedJwtException e) {
            logger.error("Invalid JWT token: {}", e.getMessage());
        } catch (ExpiredJwtException e) {
            logger.error("JWT token is expired: {}", e.getMessage());
        } catch (UnsupportedJwtException e) {
            logger.error("JWT token is unsupported: {}", e.getMessage());
        } catch (IllegalArgumentException e) {
            logger.error("JWT claims string is empty: {}", e.getMessage());
        }
        return false;
    }
}

```

Remember that we've added `bezkoder.app.jwtSecret` and `bezkoder.app.jwtExpirationMs` properties in `application.properties` file.

Handle Authentication Exception

Now we create `AuthEntryPointJwt` class that implements `AuthenticationEntryPoint` interface. Then we override the `commence()` method. This method will be triggered anytime unauthenticated User requests a secured HTTP resource and an `AuthenticationException` is thrown.

`security/jwt/AuthEntryPointJwt.java`

```
package com.bezkoder.springjwt.security.jwt;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.security.core.AuthenticationException;
import org.springframework.security.web.AuthenticationEntryPoint;
import org.springframework.stereotype.Component;
@Component
public class AuthEntryPointJwt implements AuthenticationEntryPoint {
    private static final Logger logger = LoggerFactory.getLogger(AuthEntryP
    @Override
    public void commence(HttpServletRequest request, HttpServletResponse re
        AuthenticationException authException) throws IOException, Serv
        logger.error("Unauthorized error: {}", authException.getMessage());
        response.sendError(HttpServletResponse.SC_UNAUTHORIZED, "Error: Unc
    }
}
```



`HttpServletResponse.SC_UNAUTHORIZED` is the **401** Status code. It indicates that the request requires HTTP authentication.

We've already built all things for Spring Security. The next sections of this tutorial will show you how to implement Controllers for our RestAPIs.

Define payloads for Spring RestController

Let me summarize the payloads for our RestAPIs:

- Requests:

- `LoginRequest: { username, password }`
- `SignupRequest: { username, email, password }`



- Responses:

- JwtResponse: { token, type, id, username, email, roles }
- MessageResponse: { message }

To keep the tutorial not so long, I don't show these POJOs here.

You can find details for payload classes in source code of the project on Github (<https://github.com/bezkoder/spring-boot-spring-security-jwt-authentication>).

Create Spring RestAPIs Controllers

Controller for Authentication

This controller provides APIs for register and login actions.

- /api/auth/signup
 - check existing username / email
 - create new User (with ROLE_USER if not specifying role)
 - save User to database using UserRepository
- /api/auth/signin
 - authenticate { username, password }
 - update SecurityContext using Authentication object
 - generate JWT
 - get UserDetails from Authentication object
 - response contains JWT and UserDetails data

controllers/AuthController.java



```
package com.bezkoder.springjwt.controllers;
import java.util.HashSet;
import java.util.List;
import java.util.Set;
import java.util.stream.Collectors;
import javax.validation.Valid;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.ResponseEntity;
import org.springframework.security.authentication.AuthenticationManager;
import org.springframework.security.authentication.UsernamePasswordAuthenticationToken;
import org.springframework.security.core.Authentication;
import org.springframework.security.core.context.SecurityContextHolder;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.web.bind.annotation.CrossOrigin;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
import com.bezkoder.springjwt.models.ERole;
import com.bezkoder.springjwt.models.Role;
import com.bezkoder.springjwt.models.User;
import com.bezkoder.springjwt.payload.request.LoginRequest;
import com.bezkoder.springjwt.payload.request.SignupRequest;
import com.bezkoder.springjwt.payload.response.JwtResponse;
import com.bezkoder.springjwt.payload.response.MessageResponse;
import com.bezkoder.springjwt.repository.RoleRepository;
import com.bezkoder.springjwt.repository.UserRepository;
import com.bezkoder.springjwt.security.jwt.JwtUtils;
import com.bezkoder.springjwt.security.services.UserDetailsImpl;
@CrossOrigin(origins = "*", maxAge = 3600)
@RestController
@RequestMapping("/api/auth")
public class AuthController {
    @Autowired
    AuthenticationManager authenticationManager;
    @Autowired
    UserRepository userRepository;
    @Autowired
    RoleRepository roleRepository;
    @Autowired
    PasswordEncoder encoder;
    @Autowired
    JwtUtils jwtUtils;
    @PostMapping("/signin")
    public ResponseEntity<?> authenticateUser(@Valid @RequestBody LoginReq
        Authentication authentication = authenticationManager.authenticate(
            new UsernamePasswordAuthenticationToken(loginRequest.getUs
        SecurityContextHolder.getContext().setAuthentication(authentication);
        String jwt = jwtUtils.generateJwtToken(authentication);
    }
}
```

```

UserDetailsImpl userDetails = (UserDetailsImpl) authentication.getF
List<String> roles = userDetails.getAuthorities().stream()
    .map(item -> item.getAuthority())
    .collect(Collectors.toList());
return ResponseEntity.ok(new JwtResponse(jwt,
    userDetails.getId(),
    userDetails.getUsername(),
    userDetails.getEmail(),
    roles));
}

@PostMapping("/signup")
public ResponseEntity<?> registerUser(@Valid @RequestBody SignupRequest
    if (userRepository.existsByUsername(signUpRequest.getUsername())) {
        return ResponseEntity
            .badRequest()
            .body(new MessageResponse("Error: Username is already t
    }
    if (userRepository.existsByEmail(signUpRequest.getEmail())) {
        return ResponseEntity
            .badRequest()
            .body(new MessageResponse("Error: Email is already in u
    }
    // Create new user's account
    User user = new User(signUpRequest.getUsername(),
        signUpRequest.getEmail(),
        encoder.encode(signUpRequest.getPassword()));
    Set<String> strRoles = signUpRequest.getRole();
    Set<Role> roles = new HashSet<>();
    if (strRoles == null) {
        Role userRole = roleRepository.findByName(ERole.ROLE_USER)
            .orElseThrow(() -> new RuntimeException("Error: Role is
            roles.add(userRole);
    } else {
        strRoles.forEach(role -> {
            switch (role) {
                case "admin":
                    Role adminRole = roleRepository.findByName(ERole.ROLE_A
                        .orElseThrow(() -> new RuntimeException("Error:
                        roles.add(adminRole);
                        break;
                case "mod":
                    Role modRole = roleRepository.findByName(ERole.ROLE_M
                        .orElseThrow(() -> new RuntimeException("Error:
                        roles.add(modRole);
                        break;
                default:
                    Role userRole = roleRepository.findByName(ERole.ROLE_U
                        .orElseThrow(() -> new RuntimeException("Error:

```

```

        roles.add(userRole);
    }
});

user.setRoles(roles);
userRepository.save(user);
return ResponseEntity.ok(new MessageResponse("User registered successfully"));
}
}

```

Controller for testing Authorization

There are 4 APIs:

- /api/test/all for public access
- /api/test/user for users has ROLE_USER or ROLE_MODERATOR or ROLE_ADMIN
- /api/test/mod for users has ROLE_MODERATOR
- /api/test/admin for users has ROLE_ADMIN

Do you remember that we used `@EnableGlobalMethodSecurity(prePostEnabled = true)` for `WebSecurityConfig` class?

```

@Configuration
@EnableWebSecurity
@EnableGlobalMethodSecurity(prePostEnabled = true)
public class WebSecurityConfig extends WebSecurityConfigurerAdapter { ... }

```

Now we can secure methods in our Apis with `@PreAuthorize` annotation easily.

controllers/TestController.java

```
package com.bezkoder.springjwt.controllers;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.CrossOrigin;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;
@CrossOrigin(origins = "*", maxAge = 3600)
@RestController
@RequestMapping("/api/test")
public class TestController {
    @GetMapping("/all")
    public String allAccess() {
        return "Public Content.";
    }

    @GetMapping("/user")
    @PreAuthorize("hasRole('USER') or hasRole('MODERATOR') or hasRole('ADMIN')")
    public String userAccess() {
        return "User Content.";
    }
    @GetMapping("/mod")
    @PreAuthorize("hasRole('MODERATOR')")
    public String moderatorAccess() {
        return "Moderator Board.";
    }
    @GetMapping("/admin")
    @PreAuthorize("hasRole('ADMIN')")
    public String adminAccess() {
        return "Admin Board.";
    }
}
```

Run & Test

Run Spring Boot application with command: `mvn spring-boot:run`

Tables that we define in *models* package will be automatically generated in Database.
If you check MySQL database for example, you can see things like this:

```
mysql> describe users;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+
| id    | bigint(20) | NO   | PRI  | NULL    | auto_increment |
| email | varchar(50) | YES  | UNI  | NULL    |                |
| password | varchar(120) | YES  |       | NULL    |                |
| username | varchar(20)  | YES  | UNI  | NULL    |                |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> describe roles;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+
| id    | int(11)    | NO   | PRI  | NULL    | auto_increment |
| name  | varchar(20) | YES  |       | NULL    |                |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> describe user_roles;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+
| user_id | bigint(20) | NO   | PRI  | NULL    |                |
| role_id | int(11)    | NO   | PRI  | NULL    |                |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

We also need to add some rows into **roles** table before assigning any role to User.

Run following SQL insert statements:

```
INSERT INTO roles(name) VALUES('ROLE_USER');
INSERT INTO roles(name) VALUES('ROLE_MODERATOR');
INSERT INTO roles(name) VALUES('ROLE_ADMIN');
```

Then check the tables:

```
mysql> select * from roles;
+-----+
| id | name      |
+-----+
| 1  | ROLE_USER |
| 2  | ROLE_MODERATOR |
| 3  | ROLE_ADMIN |
+-----+
3 rows in set (0.00 sec)
```

Register some users with /signup API:

- **admin** with ROLE_ADMIN
- **mod** with ROLE_MODERATOR and ROLE_USER
- **zkoder** with ROLE_USER

The screenshot shows a Postman request configuration and its response.

Request Configuration:

- Method: POST
- URL: `http://localhost:8080/api/auth/signup`
- Body tab is selected, showing raw JSON data:

```
1 {  
2   "username": "mod",  
3   "email": "mod@bezkoder.com",  
4   "password": "12345678",  
5   "role": ["mod", "user"]  
6 }
```

Response:

- Status: 200 OK
- Time: 203ms
- Size: 355 B
- Body tab shows the response JSON:

```
1 {  
2   "message": "User registered successfully!"  
3 }
```

Our tables after signup could look like this.

```
mysql> select * from users;
+----+-----+
| id | email           | password
+----+-----+
| 1  | admin@bezkoder.com | $2a$10$mR4MU5esBbUd6JWuwWKTA.tRy.jo4d4XRkgnamcC
| 2  | mod@bezkoder.com  | $2a$10$VcdzH8Q.o4KEo6df.Xesd0mXdXQwT5ugNQvu1Pl6
| 3  | user@bezkoder.com | $2a$10$c/cAdrKfiLLCDcnXvdI6MumFMthIxVCDcWjp2XcF
+----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select * from roles;
+----+-----+
| id | name
+----+-----+
| 1  | ROLE_USER
| 2  | ROLE_MODERATOR
| 3  | ROLE_ADMIN
+----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select * from user_roles;
+-----+-----+
| user_id | role_id |
+-----+-----+
|      2 |      1 |
|      3 |      1 |
|      2 |      2 |
|      1 |      3 |
+-----+-----+
4 rows in set (0.00 sec)
```

Access public resource: GET /api/test/all

The screenshot shows a Postman request configuration. The method is set to GET, the URL is <http://localhost:8080/api/test/all>, and the 'Send' button is visible. Below the request, the 'Headers' tab is selected, showing 7 headers. The 'Body' tab is also present. The response section shows a status of 200 OK, time 325ms, and size 313 B. The response body is displayed in 'Text' format, containing the string "1 Public Content.".

Access protected resource: GET /api/test/user

The screenshot shows a Postman request configuration for a protected resource. The method is set to GET, the URL is <http://localhost:8080/api/test/user>, and the 'Send' button is visible. Below the request, the 'Headers' tab is selected, showing 9 headers. The 'Body' tab is also present. The response section shows a status of 401 Unauthorized, time 218ms, and size 458 B. The response body is displayed in 'JSON' format, containing a single object with fields: timestamp, status, error, message, and path.

```

1 {
2     "timestamp": "2019-10-15T15:01:26.948+0000",
3     "status": 401,
4     "error": "Unauthorized",
5     "message": "Error: Unauthorized",
6     "path": "/api/test/user"
7 }

```

Login an account: POST /api/auth/signin

POST http://localhost:8080/api/auth/signin

Body (9) **JSON**

```

1 {
2   "username": "mod",
3   "password": "12345678"
4 }

```

Status: 200 OK Time: 1559ms Size: 612 B

Pretty Raw Preview Visualize **BETA** JSON **Copy**

```

1 {
2   "id": 2,
3   "username": "mod",
4   "email": "mod@bezkoder.com",
5   "roles": [
6     "ROLE_USER",
7     "ROLE_MODERATOR"
8   ],
9   "accessToken":
10    "eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJtb2QiLCJpYXQiOjE1NzExNTE4NDIsImV4cCI6MTU3MTIzMwremuN19p0vxfEiuH7AU2GIEdoQ9Ejs98cARunxfCyKbbG_oZWl0Nf0kUZ5ONjfTxXK-yoOxc9mKn
11   "tokenType": "Bearer"

```

Access ROLE_USER resource: GET /api/test/user

GET http://localhost:8080/api/test/user

Headers (8)

▼ Headers (1)

	KEY	VALUE	DESCRIPTION*	BU
<input checked="" type="checkbox"/>	Authorization	Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJtb2QiLCJpYXQiOjE1NzExNTE4NDIsImV4cCI6MTU3MTIzMwremuN19p0vxfEiuH7AU2GIEdoQ9Ejs98cARunxfCyKbbG_oZWl0Nf0kUZ5ONjfTxXK-yoOxc9mKn		
	Key	Value	Description	

▶ Temporary Headers (7)

Body Cookies Headers (9) Test Results Status: 200 OK Time: 50ms Size: 311 B

Pretty Raw Preview Visualize **BETA** Text **Copy**

1 User Content.

Access ROLE_MODERATOR resource: GET /api/test/mod

The screenshot shows a Postman request for `http://localhost:8080/api/test/mod`. The **Headers** tab is selected, showing an **Authorization** header with the value `Bearer eyJhbGciOiJIUzUxMiJ9eyJzdWliOiJtb2QiLCJpYXQiOjE1N...`. The response status is **200 OK**, time is **46ms**, and size is **314 B**. The response body contains the message `1 Moderator Board.`.

Access ROLE_ADMIN resource: GET /api/test/admin

The screenshot shows a Postman request for `http://localhost:8080/api/test/admin`. The **Headers** tab is selected, showing an **Authorization** header with the same value as the previous request. The response status is **403 Forbidden**, time is **49ms**, and size is **443 B**. The response body is a JSON object with the following content:

```

1 {
2     "timestamp": "2019-10-15T15:22:51.341+0000",
3     "status": 403,
4     "error": "Forbidden",
5     "message": "Forbidden",
6     "path": "/api/test/admin"
7 }

```

Solve Problem: javax.validation cannot be resolved

For Spring Boot **2.3** and later, you can see the compile error:

The import javax.validation cannot be resolved

It is because Validation Starter no longer included in web starters. So you need to add the starter yourself.

- For Maven:

```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-validation</artifactId>
</dependency>
```

- For Gradle:

```
dependencies {
    ...
    implementation 'org.springframework.boot:spring-boot-starter-validation'
}
```

Solve Problem with JDK 14

If you run this Spring Boot App with JDK 14 and get following error when trying to authenticate:

```
FilterChain java.lang.NoClassDefFoundError: javax/xml/bind/DatatypeConverter
```

Just add following dependency to *pom.xml*:

```
<dependency>
    <groupId>jakarta.xml.bind</groupId>
    <artifactId>jakarta.xml.bind-api</artifactId>
    <version>2.3.2</version>
</dependency>
```

Everything's gonna work fine.

Conclusion

Congratulation!

Today we've learned so many interesting things about Spring Security and JWT Token based Authentication in just a Spring Boot example.

Despite we wrote a lot of code, I hope you will understand the overall architecture of the

application, and apply it in your project at ease.

For understanding the architecture deeply and grasp the overview more easier:

Spring Boot Architecture for JWT with Spring Security (<https://bezkoder.com/spring-boot-jwt-mysql-spring-security-architecture/>)

You should continue to know how to implement Refresh Token:

Spring Boot Refresh Token with JWT example (<https://bezkoder.com/spring-boot-refresh-token-jwt/>)

Or visit The example that uses HttpOnly Cookies instead
(<https://www.bezkoder.com/spring-boot-login-example-mysql/>).

You can also know how to deploy Spring Boot App on AWS (for free) with this tutorial
(<https://bezkoder.com/deploy-spring-boot-aws-eb/>).

Happy learning! See you again.

Further Reading

- Spring Security Reference (<https://docs.spring.io/spring-security/site/docs/current/reference/htmlsingle/>)
- In-depth Introduction to JWT-JSON Web Token (<https://bezkoder.com/jwt-json-web-token/>)
- Spring Boot Pagination & Filter example | Spring JPA, Pageable
(<https://bezkoder.com/spring-boot-pagination-filter-jpa-pageable/>)

Related Posts:

- Spring Boot, Spring Data JPA – Building Rest CRUD API example
(<https://bezkoder.com/spring-boot-jpa-crud-rest-api/>)
- CRUD GraphQL APIs example with Spring Boot, MySQL & Spring JPA
(<https://bezkoder.com/spring-boot-graphql-mysql-jpa/>)
- Spring Boot Rest XML example – Web service with XML Response
(<https://bezkoder.com/spring-boot-rest-xml/>)
- Spring Boot File upload example with Multipart File (<https://bezkoder.com/spring-boot-file-upload/>)
- @RestControllerAdvice example in Spring Boot (<https://bezkoder.com/spring-boot-restcontrolleradvice/>)
- Spring Boot @ControllerAdvice & @ExceptionHandler example
(<https://bezkoder.com/spring-boot-controlleradvice-exceptionhandler/>)
- @DataJpaTest example for Spring Data Repository Unit Test
(<https://bezkoder.com/spring-boot-unit-test-jpa-repo-datajpatest/>)
- Spring Boot Unit Test for Rest Controller (<https://www.bezkoder.com/spring-boot-webmvctest/>)

Deployment:



- Deploy Spring Boot App on AWS – Elastic Beanstalk
(<https://www.bezkoder.com/deploy-spring-boot-aws-eb/>)
- Docker Compose: Spring Boot and MySQL example
(<https://www.bezkoder.com/docker-compose-spring-boot-mysql/>)

Fullstack CRUD App:

- Spring Boot + Vue.js example (<https://bezkoder.com/spring-boot-vue-js-crud-example/>)
- Angular 8 + Spring Boot example (<https://bezkoder.com/angular-spring-boot-crud/>)
- Angular 10 + Spring Boot example (<https://bezkoder.com/angular-10-spring-boot-crud/>)
- Angular 11 + Spring Boot example (<https://bezkoder.com/angular-11-spring-boot-crud/>)
- Angular 12 + Spring Boot example (<https://www.bezkoder.com/angular-12-spring-boot-crud/>)
- React + Spring Boot example (<https://bezkoder.com/react-spring-boot-crud/>)

If you need a working front-end for this back-end, you can find Client App in the posts:

- Vue.js JWT Authentication with Vuex and Vue Router (<https://bezkoder.com/jwt-vue-vuex-authentication/>)
- Angular 8 JWT Authentication example with Web Api (<https://bezkoder.com/angular-jwt-authentication/>)
- Angular 10 JWT Authentication example with Web Api (<https://bezkoder.com/angular-10-jwt-auth/>)
- Angular 11 JWT Authentication example with Web Api (<https://bezkoder.com/angular-11-jwt-auth/>)
- Angular 12 JWT Authentication example with Web Api (<https://bezkoder.com/angular-12-jwt-auth/>)
- React JWT Authentication (without Redux) example (<https://bezkoder.com/react-jwt-auth/>)
- React Hooks: JWT Authentication (without Redux) example
(<https://bezkoder.com/react-hooks-jwt-auth/>)
- React Redux: JWT Authentication example (<https://bezkoder.com/react-redux-jwt-auth/>)

Associations:

- JPA One To Many example with Hibernate and Spring Boot
(<https://www.bezkoder.com/jpa-one-to-many/>)
- JPA Many to Many example with Hibernate in Spring Boot
(<https://www.bezkoder.com/jpa-many-to-many/>)

Source Code

You can find the complete source code for this tutorial on Github
(<https://github.com/bezkoder/spring-boot-spring-security-jwt-authentication>).



[authentication](https://www.bezkoder.com/tag/authentication/) (<https://www.bezkoder.com/tag/authentication/>)

[authorization](https://www.bezkoder.com/tag/authorization/) (<https://www.bezkoder.com/tag/authorization/>) [jwt](https://www.bezkoder.com/tag/jwt/) (<https://www.bezkoder.com/tag/jwt/>)

[login](https://www.bezkoder.com/tag/login/) (<https://www.bezkoder.com/tag/login/>) [registration](https://www.bezkoder.com/tag/registration/) (<https://www.bezkoder.com/tag/registration/>)

[security](https://www.bezkoder.com/tag/security/) (<https://www.bezkoder.com/tag/security/>) [spring boot](https://www.bezkoder.com/tag/spring-boot/) (<https://www.bezkoder.com/tag/spring-boot/>)

[spring security](https://www.bezkoder.com/tag/spring-security/) (<https://www.bezkoder.com/tag/spring-security/>)

[token based authentication](https://www.bezkoder.com/tag/token-based-authentication/) (<https://www.bezkoder.com/tag/token-based-authentication/>)

401 thoughts to “Spring Boot Token based Authentication with Spring Security & JWT”



Haylton

October 22, 2019 at 12:42 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-23>)

Great tutorial series. Congratulations for the detail and the good explanation.

[REPLY](#)



bezkoder

October 22, 2019 at 1:13 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-24>)

Hi, thank you!

[REPLY](#)



Mykilchenko

March 18, 2021 at 9:04 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7663>)

Thank you, this is the best article on Spring Security & JWT I have ever seen!

[REPLY](#)



Akshay Kumar

September 19, 2021 at 7:18 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-12418>)

Can you please tell me how to delete a user from postman directly?



[REPLY](#)

**Siddhant**

April 3, 2022 at 4:56 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-20761>)

What if we wanted to update the role for a user on the website ? Like remove Role_Moderator and upgrade him to Role_Admin ? How to do that ?

[REPLY](#)

**Mathieu LC**

October 24, 2019 at 12:00 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-27>)

Hello, im a french dev student, thank you very much for your work! I have a probleme with this method in UserDetailsImpl.

```
=> public static UserDetailsImpl build(User user) {
    List authorities = user.getRoles().stream()
        .map(role -> new SimpleGrantedAuthority(role.getName()))
        .collect(Collectors.toList());
    return new UserDetailsImpl(
        user.getId(),
        user.getUsername(),
        user.getEmail(),
        user.getPassword(),
        authorities);
}
=> getName() "cannot resolve method"
```

I'm not very strong with stream map etc, can you explain me this block a bit more?

Thank you for your attention and continue to display this wonderful content.

Mathieu

[REPLY](#)

**bezkoder**

October 24, 2019 at 12:59 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-28>)

Hi Mathieu,

- `user.getRoles()` returns a `Set<Role>`, we convert this Set to a Stream of Role. Imagine that the stream is a collection of Role that releases items in turn.

- `map()` changes every `Role` item above to a `SimpleGrantedAuthority` object, the parameter for the constructor could be one of these Strings: 'ROLE_USER', 'ROLE_MODERATOR', 'ROLE_ADMIN'.

So, what does `role.getName().name()` do?

- `role.getName()` returns `ERole` enum object, let's call it `erole_object`. Look back to this:

```
public enum ERole {
    ROLE_USER,
    ROLE_MODERATOR,
    ROLE_ADMIN
}
```

- `erole_object.name()` returns the String corresponding to the enum ('ROLE_MODERATOR' for example).

Please make sure that you define `Role` model in `Role.java` correctly.

Regards,
bezkoder.

[REPLY](#)



Mathieu Lc

October 24, 2019 at 1:23 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-29>)

Thank you a lot for your explanation! I will follow your site and youtube channel studiously and recommend it to others students!

[REPLY](#)



bezkoder

October 24, 2019 at 1:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-30>)

Thank you so much! Wish you all the best 😊

[REPLY](#)



Phuoc

March 12, 2020 at 3:17 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-499>)

 Hi @Mathieu LC,

I think you miss getter/setter for Name field on Role.java class

[REPLY](#)**Shivam**December 31, 2020 at 6:27 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6006>)

Role has a method called getName() which returns the Enum constant & name method returns the name of this enum constant.

[REPLY](#)**Sandy**November 10, 2019 at 9:41 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-39>)

App Properties

bezkoder.app.jwtSecret= bezKoderSecretKey

bezkoder.app.jwtExpirationMs= 86400000

by defaults?

[REPLY](#)**bezkoder**November 11, 2019 at 2:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-40>)

It's custom properties.

[REPLY](#)**Sandy**November 12, 2019 at 1:51 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-41>)

where can i get that? like custom properties according to your design?

[REPLY](#)

**bezkoder**

November 12, 2019 at 3:42 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-42>)

These custom properties are what you set, personally, and should not be the same as other places.

[REPLY](#)**Peter Kronenberg**

October 22, 2021 at 12:23 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-14258>)

This is a great example. Thanks so much for this code and explanation. You have your timeout set to 10 days (if I did the math right). I assume that normally, you would want the timeout to be some much lower value, such as 10-15 minutes. How do you handle the timeout? You only want the user's login to timeout if he has been inactive. So do you get a new token with every transaction? Or if it has been 10 minutes since the last token?

**Kraloz**

November 22, 2019 at 4:54 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-54>)

Amazing article! It really helped me with a school project.

Only one question, how can I add a server side logout feature? So the token is immediately invalid

[REPLY](#)**bezkoder**

November 23, 2019 at 1:06 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-58>)

Hi, you can implement a `/logout` endpoint (or logout functionality) where you only have to get the token and remove it from `TokenStore`.

```
tokenStore.removeAccessToken(accessToken);
tokenStore.removeRefreshToken(refreshToken);
```

The detail is described at: <https://stackoverflow.com/a/42907381>
<https://stackoverflow.com/a/42907381>.

[REPLY](#)

**argeta**

November 30, 2019 at 4:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-74>)

I am regular reader of your site. All of Spring tutorials are really good. This Spring Boot Authentication with JWT tutorial is the best.

[REPLY](#)**umsuhyun(엄수현)**

December 4, 2019 at 1:54 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-84>)

Thank you for good writing. But I don't understand what's the difference between database and repository. I don't know exactly the difference between the two, so I'm asking you a question.

[REPLY](#)**bezkoder**

December 4, 2019 at 3:21 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-85>)

Hi,

A **Repository** is a database that stores the metadata for Designer objects. In other words, the data associated with objects like Entities, Modules, Table Definitions, etc. is stored as rows in tables that are part of the Repository.

The Repository also includes a PL/SQL Application Programming Interface (API) for maintaining this data.

A Repository would essentially be linked to at least one database, but in general, it is linked to many databases.

A **Database** is just a place to store data, or an application database is a place to store the data for a particular computer application.

The Repository is itself an application database, but it also stores data about (ie. metadata – data about data) other application databases. These other databases might be co-located with the Repository, but normally are stored somewhere else.

A Repository is a central common point of file storage of a related nature, a Database is a structured file or set of files that store and organize data.



I found this great answer here: <https://qr.ae/TeQcol> (<https://qr.ae/TeQcol>).

REPLY

**umsu**

December 4, 2019 at 9:45 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-86>)

Hello, I'm a beginner, so I have a lot of questions. I hope you will answer this question. I'm so frustrated because I don't understand.

In the repository, we divided the user and the role. What function does the user and the role ? For example, if you type id/pass and then go to the repository, I don't understand why you use id/email in the user. I know the reason why I want to use the role in the repository for automation, but I don't know why I use the repository user.

REPLY

**bezkoder**

December 6, 2019 at 3:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-88>)

Hi, I don't really understand your question.

But if you want to know why we use the repository user, you can find where we call its methods:

- `userRepository.existsByUsername()`
- `userRepository.existsByEmail`
- `userRepository.save()`
- `userRepository.findByUsername()`

REPLY

**Yaman M Nur (<https://yamanmnur.github.io>)**

December 11, 2019 at 6:49 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-91>)

Excellent, I have tried this tutorial and it worked!, I'm really thankful for you, I hope you are going to be successful because sharing useful knowledge for many people.

REPLY

**bezkoder**

December 11, 2019 at 7:16 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-92>)

Thank you for your comment. Hope you to be successful too!

REPLY

Yaman M Nur (<https://yamanmnur.github.io>)

December 12, 2019 at 1:32 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-93>)

I have a question, how to keep the tokens from expiring (token does not expire)?

REPLY

KaitoKid

December 12, 2019 at 9:08 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-94>)

Thanks for your post. I'm also waiting for your Spring Boot JWT with Refresh Token tutorial.

REPLY

bezkoder

August 8, 2021 at 11:21 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10552>)

Hi, here you are: Spring Boot Refresh Token with JWT example
(<https://www.bezkoder.com/spring-boot-refresh-token-jwt/>)

bezkoder

December 17, 2019 at 3:19 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-100>)

Hi, you can implement Refresh Token.

REPLY

justice

December 22, 2019 at 11:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-107>)

Hello, I would like to ask you something.

The spring security oauth 2.0 resource serve has been deprecated.

Is this tutorial the way that it should be done now that the `EnableResourceServer` is deprecated?

I would like to migrate my project that is using it, but in their migration guide there are not explanation about the resource server since they say that is out of the scope in the migration guide.

Is this the new way or can you write a tutorial with the new way about implementing oauth 2.0 ?

thanks

REPLY

bezkoder

December 23, 2019 at 1:35 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-108>)

Hi, I think that `EnableResourceServer` will not affect the code in this tutorial.

For Spring Security OAuth 2.0, I will write the tutorial in near future.

REPLY

Donnie

December 23, 2019 at 6:59 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-111>)

WOW, easy to understand your Tutorial. You make complicated things like Spring Security simple.

REPLY

Shimul

January 8, 2020 at 10:55 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-158>)

Hello,

Thank you very much for your step by step tutorial.

I got the following error: "cannot resolve method getName()" in the following method:



```
public static UserDetailsImpl build(User user) {  
    List authorities = user.getRoles().stream()  
        .map(role -> new SimpleGrantedAuthority(role.getName()))  
        .collect(Collectors.toList());  
    return new UserDetailsImpl(  
        user.getId(),  
        user.getUsername(),  
        user.getEmail(),  
        user.getPassword(),  
        authorities);  
}
```

Initially, I thought it happened maybe I did some mistake during my typing. But I copy-paste your code for ERole, User, Role Model and also the UserDetailsImpl.java but it still shows that error.

How can I fix that?

REPLY

bezkoder

January 8, 2020 at 3:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-159>)

Hi, I'm sorry, syntax highlight plugin causes the Typo.

List<GrantedAuthority> authorities = ...

You can check Role and User class again to make sure that all the fields are correct.

Another way is to download the source code.

REPLY

Michal

January 10, 2020 at 9:37 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-172>)

Thank you for this tutorial. It really helped a lot! Great job.

REPLY



Julien Rochard

January 11, 2020 at 7:05 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-175>)

Insane tuto, exactly what i needed. thx.

REPLY

adebowale

January 21, 2020 at 2:55 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-239>)

Great tutorial but my database table was not generated at startup

```
spring.datasource.url= jdbc:mysql://localhost:3306/testdb?useSSL=1
spring.datasource.username= root
spring.datasource.password= 123456
spring.jpa.properties.hibernate.dialect= org.hibernate.dialect.MySQL5InnoDBDialect
spring.jpa.hibernate.ddl-auto= update
# App Properties
bezkoder.app.jwtSecret= bezKoderSecretKey
bezkoder.app.jwtExpirationMs= 86400000
```

and any pointer on how to generate refresh token. thanks

REPLY

bezkoder

January 21, 2020 at 3:10 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-241>)

Hi, you must create **testdb** database with username & password first.

Our Hibernate configuration only generates tables.

For refresh token, I will write a tutorial when having time. 😊

REPLY

Vicente Ortiz

January 31, 2020 at 3:10 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-281>)

Hi bezkoder! thank you very much for this awesome tutorial! I have a little question though.. It all worked perfectly, but when i create an user with 2 roles (as input I wrote: "role": ["ROLE_MODERATOR", "ROLE_USER"] the app only associates the user

with user role, but not with moderator role. I tried with my own code (following ur instructions) but when it didnt work, i cloned your repo, but i still have the same problem.. do u know what it could be?

Thanks again for this amazing tutorial!

REPLY

Vicente Ortiz

January 31, 2020 at 3:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-282>)

Nevermind my question, I saw what my mistake was.. thank you again!

REPLY

bezkoder

January 31, 2020 at 3:54 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-283>)

Yeah, you should use: ["mod", "user"].

REPLY

Jiji

May 19, 2020 at 9:03 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2623>)

Hello, can you help me to resorlve this problem, i can't assign ROLE_ADMIN or ROLE_MODERATOR to user.when i add a user even i specify admin or role in DataBase it's user role !!

REPLY

bezkoder

May 19, 2020 at 9:49 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2626>)

Hi, you need to add `role: ["admin", "mod"]` in the payload 😊

REPLY

Jiji

May 19, 2020 at 6:57 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2652>)

i did but i have the some problem :(.in user_roles table i have:

user_id role_id

1 1

2 1

3 1

4 1

5 1

THX U for your answer (f)

REPLY

bezkoder

May 19, 2020 at 10:52 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2662>)

We have 3 tables, and each row in `user_roles` was generated automatically


So you should create user by sending HTTP request with payload containing `role` array.

jiji

May 21, 2020 at 11:47 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2726>)

big thx ,it's works (y)

Fastspeed

July 31, 2020 at 2:49 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4105>)

Pls can you tell me where to add role : ["admin", "mod"] in payload . because even I am facing the same problem only one role is getting assign to user.

REPLY

Fastspeed

July 31, 2020 at 3:33 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4109>)

Can you tell me how did you resolved the mistake

REPLY

Mcgill Dias

February 3, 2020 at 6:53 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-291>)

Simplesmente fantástico, o seu tutorial. Parabéns

REPLY

sss

February 5, 2020 at 7:47 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-294>)

Great tutorial but i did not understand what my database table was not generated at startup

REPLY

bezkoder

February 5, 2020 at 7:52 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-295>)

Hi, you must create `testdb` database with *username & password* first.

Our Hibernate configuration only generates tables.

REPLY

sss

February 5, 2020 at 8:12 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-296>)

But it doesn't generate the table.

REPLY

bezkoder

February 5, 2020 at 8:45 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-297>)

Please make sure that you've configured datasource in `application.properties` correctly.

If the issue still exists, please show me your console log error.

[REPLY](#)**sss**

February 5, 2020 at 9:54 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-299>)

here is an overview of its code `application.properties`:

```
spring.datasource.url= jdbc:mysql://localhost:3306/testdb?useSSL=false
spring.datasource.username= root
spring.datasource.password=

spring.jpa.hibernate.ddl-auto= update
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQL5Dialect

# App Properties
example.app.jwtSecret= secretkey
example.app.jwtExpirationMs= 123456789
```

[REPLY](#)**bezkoder**

February 5, 2020 at 11:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-301>)

Have you created MySQL `testdb` database manually?

[REPLY](#)**Karthi**

May 19, 2020 at 6:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2650>)

How to create database automatically?

[REPLY](#)**Theodora**

February 6, 2020 at 12:19 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-309>)

Hi bezkoder,

Thank you for the tutorial!

I have followed your instructions. However, for some reason in my WebSecurityConfig.java, I get an error on the following code block:

```
@Override  
public void configure(AuthenticationManagerBuilder authenticationManagerBuilder) throws Exception {  
    authenticationManagerBuilder.userDetailsService(userDetailsService());  
}
```

which underlines the userDetailsService in the brackets and says:

userDetailsService (T) in AuthenticationManagerBuilder cannot be applied to
(com.globomatics.portalproject.services.UserDetailsServiceImpl)
reason: no instance(s) of type variable(s) exist so that UserDetailsServiceImpl
conforms to UserDetailsService

Do you have an idea why I might be getting this one and how could I fix it?

Thank you in advance!

REPLY

Theodora

February 6, 2020 at 9:16 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-318>)

Nvm, please ignore me. I managed to fix it.

REPLY

bezkoder

February 7, 2020 at 9:23 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-320>)

Great! 😊

REPLY

Springy

February 22, 2020 at 6:49 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-396>)

How did you fix it?? Please in future comment the fix as well (for other people who have the same problem, like me)

[REPLY](#)**Phil**

March 25, 2020 at 10:10 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-639>)

I have the same issue. Whats this error?

[REPLY](#)**bezkoder**

March 26, 2020 at 1:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-641>)

Hi, make sure that you've add `@Service` annotation for `UserDetailsServiceImpl` class.

[REPLY](#)**Tendo**

May 6, 2020 at 12:06 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2007>)

How did you fix this,am getting the same annoying ERROR

[REPLY](#)**Rajko**

June 15, 2020 at 4:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3285>)

I have the same issue. Could you help me to fix it?

[REPLY](#)**demka**

April 22, 2020 at 11:17 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1222>) 

bonjour comment avez-vous résolu se probleme ??

[REPLY](#)**Talib**

July 19, 2020 at 8:48 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3838>)

How did you fixed it let me know

[REPLY](#)**sekenuw**

July 28, 2020 at 1:45 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4030>)

Make sure that you implemented UserDetailsService from
org.springframework.security.core.userdetails.UserDetailsService.

That worked for me.

[REPLY](#)**vaftre**

December 29, 2020 at 5:42 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5978>)

Thank you!

[REPLY](#)**Pascal Dantinger**

February 6, 2020 at 3:20 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-312>)

Hi, great Tutorial. But if I want to register a user i get this Error:
"timestamp": "2020-02-06T15:14:41.823+0000",
"status": 405,
"error": "Method Not Allowed",
"message": "Request method 'GET' not supported",
"path": "/api/auth/signup"

The same for "path": "/api/auth/signin".

Could you pls help me. Thank you very much

[REPLY](#)

bezkoder

February 7, 2020 at 3:08 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-325>)

Hi, please make sure you make a **POST** HTTP request (with payload) instead of **GET** request to `/api/auth/signin` endpoint.

[REPLY](#)**Bzz**

February 7, 2020 at 12:51 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-323>)

Hi bezkoder, maybe you have any resources, where I can will read about refresh token?

[REPLY](#)**bezkoder**

August 8, 2021 at 11:20 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10551>)

Hi, here you are: Spring Boot Refresh Token with JWT example (<https://www.bezkoder.com/spring-boot-refresh-token-jwt/>)

[REPLY](#)**Anton (<http://antonthomas.be>)**

February 9, 2020 at 1:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-329>)

Hi Bezkoden,

Thank you for the great tutorial. I do have a question, though. The `AuthenticationManager` in the `AuthController` is not able to be autowired as there is no bean found for the `AuthenticationManager`. Do you have any idea as how to solve it?

Thanks in advance!

[REPLY](#)

bezkoder

February 9, 2020 at 1:48 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-330>)

Hi, we have a bean in `WebSecurityConfig` :

```
public class WebSecurityConfig extends WebSecurityConfigurerAdap
...
@Bean
@Override
public AuthenticationManager authenticationManagerBean() throw
    return super.authenticationManagerBean();
}
...
...
```



REPLY

Kam Hieu

February 22, 2020 at 9:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-393>)

Hello. Which version of Java uses this tutorial? Is it completely Java 8?

REPLY

bezkoder

February 22, 2020 at 10:13 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-394>)

Yeah, Java 8 😊

REPLY

Alex

February 25, 2020 at 8:50 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-410>)

Hello, many thanks for these great tutorials!

I think I'll go this way to implement a simple app, but I have some questions.

Is there a way to encrypt password in the POST request? I can see it is encrypted in database but requests can be intercepted and I'm new to angular.



Do you plan to make a tutorial on deployment of a Spring boot app? I heard of solutions like heroku, azure, amazon.. but it's still a bit confusing, I'd really like a guide made by you on this (you make things look really simple!).

[REPLY](#)**bezkoder**

February 26, 2020 at 1:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-414>)

Hi, I will write the tutorials when having time 😊

[REPLY](#)**OneCentral**

February 28, 2020 at 10:59 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-433>)

Definitely look into Heroku, which is part of Salesforce Inc apparently. They are by far the easiest and most user friendly hosting platform for Spring boot applications that I know of.

[REPLY](#)**Martin**

April 25, 2020 at 1:13 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1602>)

You encrypt POST requests by using HTTPS with a valid certificate. If you do that, the whole POST request body will be encrypted. In order for your requests to not be intercepted, you should never send them over HTTP. This tutorial is good for setting it up in development, but when you go into live environment, it's necessary to look into HTTPS as well.

[REPLY](#)**proctor07**

May 21, 2020 at 10:44 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2722>)

Hello, how can we do that easily ? Is there some simple tutorials like that ?

[REPLY](#) ^

SB

February 28, 2020 at 4:21 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-428>)

The JwtResponse.type Bearer what is this? what does it mean? can it be changed to a custom one? can it be omitted?

[REPLY](#)**bezkoder**

February 29, 2020 at 1:15 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-435>)

Hi, I think that you can find the answer here (<https://security.stackexchange.com/questions/108662/why-is-bearer-required-before-the-token-in-authorization-header-in-a-http-re>) 😊

[REPLY](#)**OneCentral**

February 28, 2020 at 10:45 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-430>)

Thanks a lot for this tutorials. Been looking for this for a long time!

[REPLY](#)**juan**

March 2, 2020 at 7:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-447>)

Hello, I am a beginner in the code do you create the fields of the database tables? or do you do manual in mysql?

[REPLY](#)**bezkoder**

March 3, 2020 at 2:14 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-451>)

Hi, Spring Data will do it automatically 😊

[REPLY](#)

juan

March 3, 2020 at 12:51 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-454>)

Thank you for your response, and if I have a database already created with the same data, should your code work well? Or do I have to skip somewhere?

[REPLY](#)**bezkoder**

March 3, 2020 at 11:11 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-456>)

If you have the same database table, you don't need to run SQL queries for inserting records to roles table 😊

[REPLY](#)**Rick Meels**

March 2, 2020 at 7:30 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-448>)

Hello,

Thanks for the great tutorial, but i have one problem. When sending a request to the API with the roles "mod", "user" it always throws an exception that it could not find a role.

This even happens when using your source code.

```
{  
    "username": "henk",  
    "email": "someone@gmail.com",  
    "password": "keukentafel",  
    "role": ["mod", "user"]  
}
```

[REPLY](#)**Rick Meels**

March 2, 2020 at 7:33 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-449>)

Nevermind, as I was writing this comment I found the problem. Forgot to put the roles in the postgres database

[REPLY](#)

bezkoder

March 3, 2020 at 2:15 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-452>)

Yeah, we should do it first 😊

REPLY

khouloud

March 30, 2020 at 11:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-685>)

i have the same error.

REPLY

bezkoder

March 30, 2020 at 11:17 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-686>)

Hi, you must insert 3 rows in `roles` table as tutorial instruction first.

REPLY

lokesh

October 23, 2020 at 1:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5164>)

sir,can't we do that within the code itself.

REPLY

vikram

August 15, 2020 at 6:36 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4324>)

```
{  
  "username": "henk",  
  "email": "someone@gmail.com",  
  "password": "keukentafel",  
  "role": ["henk", "user"]  
}
```



please use above one. (insted of mod —> henk)

REPLY

**Juan Pablo**

March 3, 2020 at 2:25 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-453>)

Amazing Tutorial,

Thank you!

REPLY

**Pradeep Balachandran**

March 4, 2020 at 1:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-457>)

Amazing tutorial.

REPLY

**julian**

March 9, 2020 at 8:11 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-479>)

Hi, thanks for the tutorial I have this error that the postman shows me what do you know?

"error": "Bad Request",

"message": "Invalid JSON input: Cannot deserialize instance of `java.util.HashSet` out of VALUE_STRING token; nested exception is

com.fasterxml.jackson.databind.exc.MismatchedInputException: Cannot deserialize instance of `java.util.HashSet` out of VALUE_STRING token\n at [Source:

(PushbackInputStream); line: 5, column: 10] (through reference chain:

com.ramajudicial.Solicitud.de.Informacion.payload.request.SignupRequest["role"]"

REPLY

**bezkoder**

March 9, 2020 at 11:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-481>)

Hi, please show me your POST request 😊

REPLY

**julian**

March 10, 2020 at 4:03 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-484>)

Hi, thanks for answering if I had something wrong with the POST, now this error is generating, I am working with a sql server database

Error: Cannot insert the value NULL into column 'userId', table 'lramajudicialpru.dbo.user'; column does not allow nulls. INSERT fails.

Do you know why you are sending me null?

[REPLY](#)

**bezkoder**

March 11, 2020 at 1:45 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-488>)

Hi, this Spring Boot Application is configured to work with MySQL or PostgreSQL database, so you need to modify `application.properties` file for SQL Server Database.

[REPLY](#)

**julian**

March 11, 2020 at 3:14 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-489>)

Do you have any idea how to configure it? I have this configuration connected to the database but I don't know why it gives the previous error

```
spring.datasource.url=
spring.datasource.username=
spring.datasource.password=
spring.datasource.driverClassName=com.microsoft.sqlserver.jdbc.SQLServerDriver
spring.jpa.show-sql=true
spring.jpa.hibernate.dialect=org.hibernate.dialect.SQLServer2012Dialect
spring.jpa.hibernate.ddl-auto = validate
spring.jpa.hibernate.naming_strategy = org.hibernate.cfg.EJB3NamingStrategy
thanks.
```



bezkoder

March 11, 2020 at 3:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-490>)

You should fill url , username and password .

If you did it but the error still occurs, I'm so sorry because I've not worked with SQL Server now.

I will check it and write another tutorial when having time 😊

[REPLY](#)**abdeljabbar**

March 16, 2020 at 1:05 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-545>)

where are payload classes, i didn't find them com.bezkoder.springjwt.payload.*

[REPLY](#)**abdeljabbar**

March 16, 2020 at 3:16 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-547>)

i find it, thanks

[REPLY](#)**MensiGhaith**

March 17, 2020 at 2:27 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-553>)

Hello Bezkoder thank you , you did a great job , but hasRole(. . .) it should be changed to hasAuthority right? because at first hasRole doesn't work after that i tried with hasAuthority and it works..

[REPLY](#)**bezkoder**

March 17, 2020 at 2:39 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-554>)

Hi, Roles and Authorities are similar in Spring.

The difference is that the 'ROLE_' prefix gets added automatically for hasRole . ^
That means, hasAuthority('ROLE_USER') is similar to hasRole('USER') . 😊

[REPLY](#)

MensiGhaith

March 17, 2020 at 4:13 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-555>)

thank you bezkoder , i have a question i didn't add the prefix ROLE_ when i added my roles (because i didn't use enumarted strings), so i think that's why she doesn't work in the first time with hasRole so did you think if that will causes a problems??

REPLY

bezkoder

March 17, 2020 at 4:32 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-556>)

You must add the prefix ROLE_ to make it work 😊 Please follow step by step in the tutorial.

REPLY

MensiGhaith

March 17, 2020 at 4:45 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-558>)

ok thank you , what about the logout endpoint
the method should have parametres?

```
//tokenStore.removeAccessToken(accessToken);  
//tokenStore.removeRefreshToken(refreshToken);
```

bezkoder

March 18, 2020 at 12:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-561>)

We're gonna implement logout on frontend side (by removing token from localStorage/sessionStorage for example). So we don't need logout endpoint here.

Alberto

March 18, 2020 at 1:25 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-563>)

Hi, im new with java language and this helped me a lot. Are there any way to support and appreciate your work?

Thanks so much !!

REPLY

bezkoder

March 18, 2020 at 2:11 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-564>)

Hi Alberto,

I'm so happy to know that this tutorial helps many people like you.

If you want to donate, I have a Paypal account: tien.ngtruong@gmail.com (mailto:tien.ngtruong@gmail.com) 😊

Best Regards,
bezkoder.

REPLY

Hugo

March 27, 2020 at 5:59 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-662>)

Thank you for that great tutorial sooooooooooooo useful !

Great piece of work!

REPLY

User9888

March 29, 2020 at 5:51 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-679>)

Hi bezkoder i have a problem when i create a user and give him some roles on angular when i'm back in springBoot the role array is empty can you help please!!!

Best regards !!

REPLY

bezkoder

March 30, 2020 at 8:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-683>)

Hi, please show me the HTTP request payload.

REPLY

Radek

April 4, 2020 at 11:53 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-730>)

Hi bezkoder, thank you very much, you've done a great job!

I have one problem with Postman.

After signing in as "mod" I try to access resource: GET

`http://localhost:8080/api/test/user` (<http://localhost:8080/api/test/user>).

I send value: Bearer {my token} with key Authorization (in section Header) and I receive this error:

```
{  
  "timestamp": "2020-04-04T23:51:06.706+0000",  
  "status": 401,  
  "error": "Unauthorized",  
  "message": "Error: Unauthorized",  
  "path": "/api/test/user"  
}
```

What am I doing wrong?

REPLY

bezkoder

April 5, 2020 at 12:29 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-731>)

Hi, I've checked GET `http://localhost:8080/api/test/user` with 'mod' role and it works.

Please make sure that you use the token correctly.

REPLY

Taec0

June 14, 2020 at 1:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3264>) 

Can you post me your PostMan requests? I still get the unauthorized error
Thank you!

[REPLY](#)**jiji**

May 31, 2020 at 10:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3050>)

Hello, i have the some problem, did you solve it? can u help me plz

[REPLY](#)**H.L**

July 6, 2020 at 4:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3638>)

Hello, Can anyone solve this problem please !

[REPLY](#)**bezkoder**

July 6, 2020 at 11:32 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3640>)

Hi, you should check the `Authorization` header.

[REPLY](#)**Radek**

April 5, 2020 at 9:29 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-736>)

Ok, now I've got it. Testing this endpoint I tried to send token from Headers tab, instead using Authorisation tab. Everything is ok 😊

[REPLY](#)**Ujitha**

April 5, 2020 at 12:07 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-739>)

Hi BezKoder,

Thank you so much for you posting such superb tutorial. And could you explain a little ↗ how this JWT token has secured in this api.

[REPLY](#)

bezkoder

April 6, 2020 at 2:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-747>)

Hi, JWT does not hide, obscure, secure data at all.

You can see that the process of generating JWT (Header, Payload, Signature) only encode & hash data, not encrypt data.

The purpose of JWT is to prove that the data is generated by an authentic source.

If you want to know more details about JWT, you can visit:

In-depth Introduction to JWT-JSON Web Token (<https://bezkoder.com/jwt-json-web-token/>)

[REPLY](#)

Jorge

April 8, 2020 at 12:28 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-772>)

Awesome job, thanks for sharing.

[REPLY](#)

Foliveira

April 8, 2020 at 6:03 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-795>)

Excellent! It worked perfectly. That's not the first time I found here exactly just what I looking for. Thanks for the good work.

[REPLY](#)

Misho

April 12, 2020 at 11:37 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-844>)

Very helpful post. Could you add how to revoke tokens?

[REPLY](#)

bezkoder

April 14, 2020 at 3:36 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-857>)

Hi, I will write the tutorial for revoke tokens when having time 😊

REPLY

Miller

April 13, 2020 at 11:43 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-852>)

I loved this Spring Boot Auth tutorial! I actually read your blog fairly often, and you're constantly coming out with some great tutorials here.

REPLY

Haibara

April 14, 2020 at 6:10 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-859>)

Hello!

it's giving me this: "message": "Error: Role is not found." to refer to this one: case "admin":

```
Role adminRole = roleRepository.findByName(ERole.ROLE_ADMIN)
.orElseThrow(() -> new RuntimeException("Error: Role is not found."));
roles.add(adminRole);
```

break;

Can you tell me what's the problem please? Thanks.

REPLY

bezkoder

April 14, 2020 at 6:49 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-861>)

Hi, maybe you forgot to run SQL insert 3 rows of Role table. 😊

REPLY

Larry

August 15, 2020 at 10:27 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4331>)

I run SQL script but the issue still remains

[REPLY](#)**bezkoder**

August 16, 2020 at 3:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4335>)

Please follow step by step in the video demo:

<https://youtu.be/o8DEk4XGcZw> (<https://youtu.be/o8DEk4XGcZw>)

[REPLY](#)**Etienne BELEMNEGRE**

April 22, 2020 at 8:32 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1276>)

very good and detailed tutorial; thanks a lot

[REPLY](#)**sai**

April 24, 2020 at 2:21 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1421>)

For admin while signing up i have given the role as user and for signin it s coming good but for <http://localhost:8080/api/test/admin> (<http://localhost:8080/api/test/admin>) it is coming as 403 Forbidden

[REPLY](#)**bezkoder**

April 24, 2020 at 8:08 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1527>)

Hi, please make sure that you set the correct Authorization Header in HTTP request.

[REPLY](#)**Filipe**

April 25, 2020 at 1:51 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1603>) 

Can you post here your headers in the request? I got i problem and i think the header is the cause.

[REPLY](#)**bezkoder**

April 26, 2020 at 9:23 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1664>)

Hi, you need to set `content-type: application/json` for HTTP request header.

[REPLY](#)**Akshatha**

April 27, 2020 at 4:43 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1674>)

It has been set. Still facing the issue with same error.

[REPLY](#)**Akshatha**

April 27, 2020 at 4:42 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1673>)

```
{  
  "username": "alphabank",  
  "password": "alphabank",  
  "role": ["mod", "user"]  
}
```

this is the request i am sending, and the header is content-type-
`application/json`

[REPLY](#)**bezkoder**

April 27, 2020 at 6:53 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1675>)

You should have 'email' in the payload.

[REPLY](#)

Prashant

April 25, 2020 at 10:00 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1658>)

Thanks a lot for this nice and clear tutorial

REPLY

Aashna

April 28, 2020 at 11:24 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1718>)

Hello,

I'm getting the following error, whenever I try to create a signup POST request:
ERROR: insert or update on table "user_roles" violates foreign key constraint
"fkrhfovciq1l558cw6udg0h0d3"

Detail: Key (role_id)=(2) is not present in table "role".

I've already inserted the 3 roles you mentioned.

Do you know why I'm getting this error? Thank you for your help! 😊

REPLY

bezkoder

April 29, 2020 at 8:29 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1758>)

Hi, I think you can drop `user_roles` table, then drop `users` and `roles` table.
Just do everything from the beginning. Maybe you miss or make mistake in a certain step.

REPLY

Benny Cisneros

May 2, 2020 at 9:49 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1879>)

Great tutorial!

I have a question, How can I modify it to authenticate a user using its email and password instead of username and password ?

REPLY

bezkoder

May 2, 2020 at 11:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1883>)

Hi, you can see the email as username in the signup process.

REPLY

TnCoders

January 26, 2021 at 7:13 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6563>)

Thank you for This Awesome Gift Tutorial 😊

I have many other Application that use the same Table and there is no possible way to change table structure as it's in production.

We have email,password Field so can you please show me How to force UsernamePasswordAuthenticationToken to attempt auth using email instead of username please.

REPLY

nico

May 3, 2020 at 6:44 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1890>)

Thx for this tutorial, I looked through a lot of tutorials and couldn't understand any of them until I found yours.

Thank you so much

REPLY

GM

May 3, 2020 at 4:45 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1899>)

Thanks for this amazing course. It was really easy to understand it.

I have one question, given this example code, how could I implement an oauth2 login as well?

E.g. : when the user visits /signin , I would like to provide the options of logging in either with jwt or oauth2 (github/google). Can you give me a hint?

REPLY

bezkoder

May 4, 2020 at 2:16 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-1905>)

Hi, you can read this article (<https://spring.io/guides/tutorials/spring-boot-oauth2/>).

REPLY

Volker

May 6, 2020 at 6:04 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2034>)

Really great tutorial, it helped me a lot, thank you very much! 😊

But one question:

Why can you write `@PreAuthorize("hasRole('ADMIN')")`
and not `@PreAuthorize("hasRole('ROLE_ADMIN')")`

We never used the string ADMIN anywhere, only ROLE_ADMIN as part of the enum.

REPLY

bezkoder

May 6, 2020 at 11:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2040>)

Hi, the 'ROLE_' prefix gets added automatically for `hasRole`. If you want to work with `ROLE_ADMIN`, just use `hasAuthority('ROLE_ADMIN')`.

REPLY

Volker

May 11, 2020 at 6:11 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2249>)

ah, thank you so much, very simple explanation and it makes sense! I didn't take a course on Spring Security yet, so I didn't know that.

REPLY

Mayur

May 7, 2020 at 8:24 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2050>)



Best Tutorial!

I have learned lot of new things.

Can you explain to me the functionality of every role?

REPLY

bezkoder

May 7, 2020 at 11:30 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2066>)

Hi, it depends on your use cases. The roles in this tutorial is used for illustrating authority 😊

REPLY

Jessy

May 7, 2020 at 10:54 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2054>)

Hello,

I'm trying to follow your tutorial but I'd like to have a connexion without username (just email/password), what is the workaround for this? I'm in trouble when I need to implement the UserDetailsService because there is no loadByEmail method or something like this.

REPLY

bezkoder

May 7, 2020 at 11:33 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2067>)

Hi, you can treat 'username' as 'email'. That means, when saving user information to the database, the username column stores email.

REPLY

Dennis Nyoni

May 7, 2020 at 11:08 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2055>)

Hello Sir

Thank you so much for such a detailed tutorial. You made life very easy for more in learning spring authentication.



However, I am facing two challenges; 1. I cant add more than one users because in the user_roles table the ids for both user and the role are unique. I get an exception:
`java.sql.SQLIntegrityConstraintViolationException: Duplicate entry '1' for key 'UK_5q4rc4fh1on6567qk69uesvyf'`

2. After registering a user I get another exception on trying to login:
 2020-05-07 13:05:36.007 WARN 12224 — [nio-8080-exec-7] o.s.s.c.bcrypt.BCryptPasswordEncoder : Encoded password does not look like BCrypt
 2020-05-07 13:05:36.008 ERROR 12224 — [nio-8080-exec-7] z.o.m.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials

How best can I avoid roles column in the user_roles table to be non unique or is there a different approach.

[REPLY](#)

bezkoder

May 7, 2020 at 11:42 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2073>)

Hi, I don't really understand your question.

"I cant add more than one users because the in the user_roles table the ids for both user and the role are unique."

You can add user by sending HTTP request to `/api/auth/signup` endpoint (with `role` array in the payload).

[REPLY](#)

Dennis Nyoni

May 8, 2020 at 7:49 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2096>)

its about the relationship table. the one that has two columns for either ids (role_id and user_id). Since we created a table with 3 roles that have ids 1,2, and 3 in the table the ids are unique say if my first user has id=1 and role is ROLE_USER which has id=1 then if i wish to add another user with id=2 and role ROLE_USER again when added to the relationship table where role_id = 1 already exists. this will create a scenario like:

`user_id |role_id`

`1 | 1`

`2 | 1`

which then complains of constraint violation issues since role_id must be unique. well i had to create new roles with new ids. ▲

my question number 2

After registering a user I get another exception on trying to login: 2020-05-07

13:05:36.007 WARN 12224 — [nio-8080-exec-7]

o.s.s.c.bcrypt.BCryptPasswordEncoder : Encoded password does not look like BCrypt

2020-05-07 13:05:36.008 ERROR 12224 — [nio-8080-exec-7]

z.o.m.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials

What could be the cause?

[REPLY](#)



bezkoder

May 8, 2020 at 12:46 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2107>)

1. The relationship between User entity and Role entity is Many to Many.

We don't add any record to `user_roles` table directly. Please look at how we signup user in `AuthController`.

I will write a tutorial for Spring JPA Many to Many Association when having time.

2. I don't really know what was wrong. You can debug yourself and notice these lines:

```
User user = new User(signUpRequest.getUsername(),
                     signUpRequest.getEmail(),
                     encoder.encode(signUpRequest.getPassword()
```

[REPLY](#)



Dennis Nyoni

May 8, 2020 at 6:38 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2119>)

Thanks very much I will do that and check whats causing the exception



PK

June 20, 2020 at 7:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3377>)





Hey Bezkoder,

i am not able to understand what might be the root of Empty coded password, i searched it everywhere,user has already been registered,but i am facing the above issue and error is coming as Bad credenentials

**Tendo**

May 8, 2020 at 9:18 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2100>)

Apart from component scanning , if you missed web-starter dependency , it could cause a ripple , that is what i've done and failed me many times.

[REPLY](#)**Dennis Nyoni**

May 8, 2020 at 6:40 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2120>)

Oh ok let me check. thanks for the response!

[REPLY](#)**Mpho Vic**

May 8, 2020 at 10:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2129>)

main] o.s.b.web.embedded.tomcat.TomcatStarter : Error starting Tomcat context.
Exception: org.springframework.beans.factory.UnsatisfiedDependencyException.

M I the only one ?

[REPLY](#)**Adrian**

May 9, 2020 at 4:57 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2154>)

Hello!

Amazing work, I used this implementation and everything works fine. Thanks for sharing.

However, I have a question because I want to add the option remember me to login and I am not sure how to implement it in this case.



I have API in spring boot and frontend in react. I tried to add rememberMe() function at configure(HttpSecurity http) function at WebSecurityConfig class, but after that i don't see a remember-me cookie in the browser.

Do you have any advice?

Greetings

Adrian

REPLY

LC

May 10, 2020 at 2:39 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2172>)

Hello, thank you for the tutorial. I keep getting "Error: Unauthorized" when I go to /user , /mod, or /admin and /all. Everything else seems to work okay. Do you have any idea as to why I might be getting this error?

REPLY

bezkoder

May 10, 2020 at 8:32 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2186>)

Hi, please make sure that you use correct Token in HTTP request.

REPLY

Khatri (<http://bezkcoder.com>)

May 13, 2020 at 6:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2369>)

Hey there can u please help me with error
"internal server error"

when i m passing the jason body it is showing error as: Internal server Error
and error message as : "Role not found"

REPLY

bezkoder

May 13, 2020 at 9:36 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2372>)

Hi, maybe you forgot to insert 3 records into roles table 😊

REPLY**Hq**

May 12, 2020 at 7:48 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2295>)

Hello, Thank you so much for this great tutorial !

I have implemented this tutorial, but I have a problem.

When localhost:8080/api/expense/all called, it's successfully as expected. But when localhost:8080/api/expense/76 (76 is ID for an expense), the expenseService always returns null (500 server error).

What could be the cause? and how to fix it?

REPLY

Sascha

May 12, 2020 at 9:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2337>)

Hey. Thank for the tutorial but I think there might be one problem or it's only happening for me. But maybe you can reproduce it. I'm using the full tutorial of Angular and Spring Boot and if I register and directly login with this account I get 2020-05-12 23:20:09.452 ERROR 13476 — [nio-8080-exec-7]

d.example.project.security.jwt.JwtUtil : Invalid JWT token: JWT strings must contain exactly 2 period characters. Found: 0

The JWT token is undefined. So the typical Angular behaviour if something is not loaded. Is that a special case and should somehow be validated in Spring Boot? Or is anything wrong in Angular? The method doFilterInternal() in AuthTokenFilter.java is causing this.

REPLY

Sascha

May 12, 2020 at 9:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2338>)

Okay I could fix it in a not very acceptable manner. In the authInterceptor in Angular you are using the line const token = this.token.getToken(); and this is giving me undefined and is not null and gives it to the Spring Boot backend. The only way to handle it is if (token != null && token != "undefined") {

REPLY

Bogdan

June 18, 2021 at 2:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9159>)

If I clone your repo, the app is working fine. If I try to build the app after yours, I got Invalid JWT token: JWT strings must contain exactly 2 period characters. Found: 0. I look forward to hear from you with a solution. Thank you

REPLY

Shraddha

January 3, 2021 at 4:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6059>)

I could not understand why token value is undefined as everything is running fine in postman

REPLY

Bogdan

June 18, 2021 at 1:54 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9158>)

Hello! Were you able to resolve the error caused by Invalid JWT token? I have the same problem and I couldn't solve it with (token != null && token != "undefined"). Thank you

REPLY

Qwerty

May 14, 2020 at 2:03 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2417>)

how can i implement the same in oracle database, i have some issues with this. if you can help me, i'll be very greatful. i hear that the versions are the most current issue.

REPLY

NTD

May 14, 2020 at 1:41 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2428>)

Hello, Thank you so much for this great tutorial !
I have implemented this tutorial, but I have a problem.
when i call:



POST: <http://localhost:8080/api/auth/signin> (<http://localhost:8080/api/auth/signin>)

I filled out :

```
{
  "username": "user",
  "password": "123456"
}
```

and postman response:

```
{
  "timestamp": "2020-05-14T13:30:02.827+0000",
  "status": 401,
  "error": "Unauthorized",
  "message": "Error: Unauthorized",
  "path": "/api/auth/signin"
}
```

and eclipse response: "Unauthorized error:User account is locked"

Although I have filled in the correct information.

How can I fix it? thanks

[REPLY](#)

bezkoder

May 15, 2020 at 8:09 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2449>)

Hi, "User account is locked" happens after a number of failed authentication events.
So you need to check the issue why you couldn't login with this account.

[REPLY](#)

Kenyodarz

May 21, 2020 at 4:36 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2733>)

In UserDetailsImpl.java:

Switch from false to true by the following methods:

```
public boolean isAccountNonExpired()
public boolean isAccountNonLocked()
public boolean isCredentialsNonExpired()
public boolean isEnabled()
```

Because if you automatically generated them by default they are false.

PD: Sorry, I'm really not very good at English



[REPLY](#)

Soumendu Das

May 19, 2020 at 12:36 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2631>)

I've implemented jwt with spring security and work's fine, but when I'm trying to access the API those have @preAuthorize it's giving me unauthorized when hitting from angular(v9) but it's working fine in postman!

I have ensured that the login role and preAuthorize api roles are same.

Why is this happening? I have no idea...

Please help...

REPLY

bezkoder

May 19, 2020 at 2:04 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2638>)

Hi, you can follow this Angular 8 JWT Auth tutorial (<https://bezkoder.com/angular-jwt-authentication/>). 😊

REPLY

Karthi

May 19, 2020 at 6:09 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2648>)

Hi, how can I add a cascading dropdown in the signup page , and the data's in the dropdown from the database. How it is possible in the backend and frontend?

REPLY

bezkoder

May 19, 2020 at 10:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2663>)

Hi, please take a look at following tutorial (also related fullstack tutorials insides) , I think it contains some idea to implement your requirement:

Spring Boot, Spring Data JPA – Rest CRUD API example (<https://bezkoder.com/spring-boot-jpa-crud-rest-api/>)

REPLY



Hussain

May 19, 2020 at 8:40 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2659>)

You're the best teacher that I've ever come across in my coding journey who can explain in detail what spring security and jwt are all about. I don't know how I can describe you but you're genius. This is an inspirational tutorial and I look forward to see more powerful tutorial of this type. Once again, I will say big thank you

[REPLY](#)

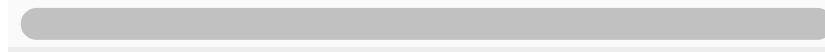
Bohdan

May 26, 2020 at 10:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2956>)

Hi! This is an amazing article, thank you for your job.

I've written all the same. But I have one problem. If I want to get properties of the current user in my own method, I write this:

```
CustomerDetailsImpl currentCustomer
Authentication authentication = SecurityContextHolder.getContext()
if (!(authentication instanceof AnonymousAuthenticationToken)) {
    currentCustomer = (CustomerDetailsImpl) authentication.getPr
}
```



In headers from Postman I send my bearer token after login.

But in authentication I get anonymousUser.

Why is this happening?

[REPLY](#)

Bohdan

May 26, 2020 at 11:11 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-2958>)

Solved, my mistake 😊

[REPLY](#)

Enrique Gordon

November 19, 2020 at 8:42 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5473>) 

how did you do it?

[REPLY](#)**David Montellano**

February 5, 2022 at 12:34 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19132>)

Hi @Enrique Gordon, My solution was:

```
Authentication authentication =  
SecurityContextHolder.getContext().getAuthentication();  
UserDetailsImpl currentUser = (UserDetailsImpl) authentication.getPrincipal();
```

This way you can get data current user in any class or method.

Regards.

[REPLY](#)**sharad**

May 28, 2020 at 10:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3012>)

i want source code of this tutorial.

can you please share the github link?

[REPLY](#)**bezkoder**

May 29, 2020 at 12:32 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3013>)

Hi, it is in the Source Code section.

[REPLY](#)**Lakbir**

May 31, 2020 at 2:31 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3054>)

thank you very much for your work! Great Tuto

[REPLY](#)

Adrian Voicu

June 1, 2020 at 6:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3065>)

Thank you very much for the effort to create such a jewel.

I've been looking for something like this for a long time.

There are many who have dealt with this subject, but most of the time they have left it half, incomplete or not refreshed.

Man, you found a niche that is highly sought after and appreciated by boot-spring developers.

The secret is the richness of details and the fact that it works!

I recommend adding Lombok and keeping it updated.

Success!

[REPLY](#)

Firoz Hasan

June 4, 2020 at 3:37 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3096>)

Request

```
{
  "username": "mod",
  "email": "dignt@gmail.com",
  "password": "123456",
  "role": ["mod", "user"]
}
```

Response

```
{
  "timestamp": "2020-06-04T03:31:19.290+0000",
  "status": 500,
  "error": "Internal Server Error",
  "message": "Error: Role is not found.",
  "path": "/api/auth/signup"
}
```

PS : I'm running the code you have provided in github.

[REPLY](#)

bezkoder

June 4, 2020 at 1:23 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3104>)

Hi, you should use SQL script to insert 3 rows in `roles` table first.

REPLY

Krzysztof

June 4, 2020 at 11:13 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3102>)

Hi, I have problem with application, because app throw "Unauthorized error: Bad credentials". And above is "Empty encoded password".

`o.s.s.c.bcrypt.BCryptPasswordEncoder : Empty encoded password`

`p.z.l.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials`

REPLY

HansKim

July 16, 2020 at 1:58 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3766>)

check `UserDetailsImpl.java` Constructor

```
public UserDetailsImpl(Long id, String username, String ema
                      Collection authorities)
{
    this.id = id;
    this.username = username;
    this.email = email;
    this.password = password;      ===== this one
    this.authorities = authorities;
}
```

REPLY

hemanth

June 10, 2020 at 9:24 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3200>)

Hey thanks for this tutorial. But I added course model(id,name,description) and controller doing crud operations. But when i authorize and then add values to the course using postman , its getting added but the name and description fields are displaying null. May i know whats the problem

REPLY

Ingo K

June 10, 2020 at 2:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3208>)

Hey,
thank you for this great tutorial.
I got the following error:

Field jwtUtils in com.ingokoepp.xsamples.security.jwt.AuthTokenFilter required a bean of type 'com.ingokoepp.xsamples.security.jwt.JwtUtils' that could not be found.

[REPLY](#)

Ingo K

June 10, 2020 at 3:08 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3209>)

Nevermind.. i forgot to add @Component to the JwtUtils.java class 😊

[REPLY](#)

azzurptkl

June 13, 2020 at 4:15 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3260>)

Hi, I've downloaded this repo from github and upgraded it to use spring boot 2.3.0 but now whenever i try to login using wrong credentials the message property on the response is empty.

This is what I get, it happens with every unauthorized response:

```
{  
  "timestamp": "2020-06-13T16:12:23.219+00:00",  
  "status": 401,  
  "error": "Unauthorized",  
  "message": "",  
  "path": "/api/auth/signin"  
}
```

The logger by the way display the correct message in the console ("Unauthorized error: Bad credentials").

Do you happen to know the reason?

[REPLY](#)



vikas ghodke

June 15, 2020 at 10:21 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3277>)

its very useful this code...thanks you so much

REPLY

Gabor

June 15, 2020 at 12:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3282>)

one of the best tutorials i've ever seen!
especially according to spring security

REPLY

Sachin

June 17, 2020 at 12:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3308>)

Sir How To Add The Data i DataBase using Postman Will You Please Explain The Example

REPLY

Omayma

June 18, 2020 at 9:44 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3346>)

Hey again,
I want to sign up and sign in using also the email address. Any help please?
(Spring boot / Angular)

REPLY

Edyta

June 22, 2020 at 5:06 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3402>)

What can be the reason why I'm not receiving ANY response from server?
I've made everything as in tutorial step by step...It's very weird.

REPLY

Jhonatan

December 30, 2020 at 3:13 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5989>)

Hello, I have the same problem that you, ¿you got any solution for that?

REPLY

mercy

June 28, 2020 at 11:02 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3502>)

Thank you so much, have been trying to create tokens for so long.

REPLY

Pavan Patidar

June 29, 2020 at 5:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3534>)

Hi,

I want to host some static content from the application build, but i am not able to allow publicly accessible content from static directory.

can you suggest something.

Thanks

pavan

REPLY

Nikola

June 30, 2020 at 1:12 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3542>)

Hi,

when i try to run the app i get this error Consider defining a bean of type 'org.springframework.security.authentication.AuthenticationManager' in your configuration.

This happens in authController

I know you defined a bean and wired it in the controller, but i dont get it.

Can you explain please?

REPLY



Kai K

July 1, 2020 at 3:17 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3560>)

Hello and thank you for this great tutorial!

I tried to get it running with openjdk 14 and get following error when trying to authenticate:

FilterChain java.lang.NoClassDefFoundError: javax/xml/bind/DatatypeConverter

Could found help here:

<https://stackoverflow.com/questions/43574426/how-to-resolve-java-lang-noclassdeffounderror-javax-xml-bind-jaxbexception-in-j>

<https://stackoverflow.com/questions/43574426/how-to-resolve-java-lang-noclassdeffounderror-javax-xml-bind-jaxbexception-in-j>

So by adding following dependency to pom.xml:

jakarta.xml.bind

jakarta.xml.bind-api

2.3.2

everything works fine.

REPLY

bezkoder

July 1, 2020 at 3:49 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3561>)

Thank you so much, I will update the tutorial 😊

REPLY

Rafat

July 15, 2020 at 1:38 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3758>)

Hi, thank you for this great tutorial;

I have one question about UsernamePasswordAuthenticationFilter, Do we only use it in the http.addFilterBefore()

I thought that we will use it for each request (Endpoint of the Test Controller for example).

Thank you so much.

REPLY



Kunal Pandey

July 17, 2020 at 7:49 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3797>)

Thank a lot man. That's the cleanest example.

REPLY

Driger Khanh

July 18, 2020 at 6:00 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3808>)

Hi thank you for your post, it really helps me.

I'm stuck at creating a new user, The user table is created but user_role is null.

Can you help me with it?

REPLY

Alan Naicson

July 19, 2020 at 10:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3840>)

Works perfectly, Thank you! That was one of the best tutorials I have seen about this subject

REPLY

CrypticDelight

July 20, 2020 at 6:38 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3856>)

Great tutorial, just having issue with one bit...AuthEntryPointJwt class.

I'm building a multi-module project using Gradle. When I build the application and attempt to run it it fails saying "WebSecurity required a bean of type "AuthEntryPointJwt" that could not be found."

Wondering if you had seen such an issue before?

REPLY

Alex

July 20, 2020 at 9:13 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3861>)



IT workkkks !! Thank U so Much !!

[REPLY](#)**Somach**

July 22, 2020 at 12:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-3889>)

Hi,

Can i use h2 database for this?

If it's possible, can someone tell me what do i need to change for h2?

I tried to change it but i can't open h2 and insert roles.

[REPLY](#)**cyril**

July 30, 2020 at 5:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4089>)

you just have to change the driver in pom.xml and in application.properties, then change jdbc url in application properties

[REPLY](#)**cyril**

July 27, 2020 at 9:44 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4000>)

Hello,

for logout it is really usefull to create it or just remove cookies from front is enough ?

because i did not see a great implementation of logout....

is there ip verification in your code (i dit not analyzed all code)

thank you!

[REPLY](#)**foxi.chen**

July 29, 2020 at 12:52 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4053>)

Hello,

thanks for your tutorial. I have a question: why does the statement

"filterChain.doFilter(HttpServletRequest, HttpServletResponse)" call the authentication process again? Actually, in the method "doFilterInternal", it has already authenticated

the token.

In my log, there are SQL of authentication process called twice, so I debug the programme, and find the doFilter method call the UserDetailImpl once again. How do I avoid this? or is it normal?

I hope my question is clear.

thanks

ps: my log like this:

Hibernate: select * from user where username=?

Hibernate: select * from user where username=?

REPLY

Meenal

July 30, 2020 at 9:40 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4081>)

Hi Thanks for this tutorial, I have just one easy query on how to get current user object here in backend

REPLY

moon

August 5, 2020 at 9:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4207>)

Thank you... great help me.. now.... thank you

REPLY

Kevin

August 5, 2020 at 10:32 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4208>)

Hello!!Very nice tutorial you open my mind!!

I have 1 question for you if i want to add more than one restcontroller just to get some data from database , i added @PreAuthorize annotation and configured security config properly but i am getting 401 error???

My question is do i need every time that i make a post request to sent header so i can get authorized ??? or when i log in automatically from sesion storage server knows that i am authenticated...????

REPLY



javacoder

August 7, 2020 at 5:25 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4233>)

I got this error: 'Can't find the request for http://localhost:9000/api/auth/signup's (http://localhost:9000/api/auth/signup's) Observer' when attempting to signup a new user. This error is thrown inside doFilter method in SecurityContextHolderAwareRequestFilter class

Thanks in advance

[REPLY](#)

Pawel

August 9, 2020 at 3:39 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4247>)

How to test such a configuration, namely the controller methods from @PreAuthorize ?

[REPLY](#)

hani

August 9, 2020 at 3:51 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4248>)

hey , great job but am sorry where did you specify the roles that can access a specific url for exp (the user can access the /user and cannot access the /admin)

[REPLY](#)

Luiz Carlos

August 9, 2020 at 6:40 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4249>)

Dude, great tutorial.. I've tested it out and worked perfectly on postman... However, if I create an account using the interface on the browser and I log in with user role, when I try accessing "User content" it shows me an error message with "Unauthorized", even though I'm logged in with user role... Same it is for mod/admin. Any idea what that might be? Thanks!

[REPLY](#)

rmm

August 12, 2020 at 2:32 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4285>)

```
public class AuthTokenFilter extends OncePerRequestFilter {
// ...
@Override
protected void doFilterInternal(HttpServletRequest request, HttpServletResponse
response, FilterChain filterChain)
throws ServletException, IOException {
// ...
UserDetails userDetails = userDetailsService.loadUserByUsername(username);
// ...
}
```

Well, it will hit the database everytime when a request comes in, basically every click on the UI, every incoming api call, etc triggers a select query against the DB in order to fetch the user data again and again and again...

I know, I know security is important, but don't you think it is a little resource consuming way to maintain security? I imagine, the user logs in, the backend checks that everything is OK, returns the token, and that's it. No more DB harassment for finding out that the user and its roles are still existing and intact... in the same session... in every couple of seconds. If the user holds the token (and it is not expired) the backend should accept that token as a valid one – without checking the user data in the db.

What are the good ways to keep it still secured but skip the unnecessary resource consuming calls?

Storing the Authentication object in the session? Why not? Spring must have some tools to manage this.

Storing every user detail (password included) in the encoded jwt? Ok, it seems not so secure. 😊

AuthProvider with caching functionality? And with cache invalidation ofc.

Other solutions?

Cheers!

[REPLY](#)

Serge

October 21, 2020 at 1:02 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5141>)

I have the same question. It seems to me that the logic behind JWT would be to store the user authorisation in the token (hence the name "claims"). They are as secure (or as insecure) as the token itself. Obviously, it makes changing user rights somehow difficult, but you could use the expiration date to set a limit.

[REPLY](#)**Aris**

August 14, 2020 at 11:03 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4310>)

Amazing tutorial bezkoder! My only issue is the fact that it appears too low in Google Search.

I tried DZone's tutorial for Bootiful App but yours is much more understandable and well-written.

Thanks for the effort!

[REPLY](#)**bezkoder**

August 14, 2020 at 12:39 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4312>)

Thank you, I'm so happy to know that my work helps other people like you 😊

[REPLY](#)**vikram**

August 15, 2020 at 6:41 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4325>)

Hi bezkoder,

Thanks for tutorial , I am able to call all APIs through Postman, But in browser i am unable to access this application. I am getting below error page. i used the # App Properties

bezkoder.app.jwtSecret= bezKoderSecretKey
bezkoder.app.jwtExpirationMs= 86400000

Can you please help on this. did i missed any thing.

Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Sat Aug 15 23:40:56 IST 2020

There was an unexpected error (type=Method Not Allowed, status=405).

Request method 'GET' not supported

[REPLY](#) 

Sercan

August 15, 2020 at 9:02 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4326>)

Although I added 3 rows (ROLE_USER,ROLE_MODERATOR and ROLE_ADMIN) in roles table , it still throws an error . (java.lang.RuntimeException: Error: Role is not found.). I use Oracle Database

REPLY

aladin

August 21, 2020 at 11:22 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4419>)

any help ?

REPLY

Barry

August 15, 2020 at 10:26 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4330>)

It's an amazing tutorial for me. I wanted to try it but there is a problem.

In signup method of AuthController, roles cannot be defined. It assigns a message "Error: Role is not found."

Here is my ROLES_JWT Table

ID ROLE

1 ROLE_USER

2 ROLE_ADMIN

3 ROLE_MODERATOR

When I wrote a json object for signing up, it throws 505 internal error message because of this reason.

```
{  
    "username": "user1",  
    "password": "user123456789",  
    "email": "user@example.com",  
    "role": ["user","mod"]  
}
```

Where is the problem ? How can I fix it?

I use Oracle 11g Database

I hope you can reply my question

Thank you

REPLY

bezkoder

August 16, 2020 at 3:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4334>)

Hi, you can follow the step in video demo:

<https://youtu.be/o8DEk4XGcZw> (<https://youtu.be/o8DEk4XGcZw>)

REPLY

Brenda

August 15, 2020 at 10:45 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4332>)

There is a problem in many to many part.

Values cannot be inserted to USER_ROLES table.

How can I fix it?

REPLY

bezkoder

August 16, 2020 at 3:08 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4336>)

Hi, you can drop all the tables and follow step by step in the video demo from the beginning:

<https://youtu.be/o8DEk4XGcZw> (<https://youtu.be/o8DEk4XGcZw>)

REPLY

Manish

August 18, 2020 at 1:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4361>)

Such Helpful article explained very well and it is saying "it took lot of effort to make it understandable".



I've given time to understand article and able to relate the terminologies regarding spring security – authentication, authorization, principal and grant authorities. also leveraged jwt token-based-authentication mechanism with difference of session-based authentication.

After that i able to create custom project with no difficulties and that because of this article reference.

Thank You

God Bless bezkoder 😊

REPLY

bezkoder

August 18, 2020 at 3:07 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4364>)

Hi, thank you for your comment. I am so happy to know that my effort helps you! 😊

REPLY

Myo Myint

August 31, 2020 at 5:39 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4546>)

Thank you for your tutorial, bez.

REPLY

Ricardo Miguel Barros Ferreira

September 4, 2020 at 10:27 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4601>)

Good Morning

The tutorial is very cool, but I have a problem registering

Give me error 500

I downloaded your code, changed the database and still give me the same error

follow a code

I hope I can help

<http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>)

{

“username”:“mod”,

“email”：“ricardo_miguel31@hotmail.com”,



```

"password":"123456789",
"role":["mod","user"]
}
{
"timestamp": "2020-09-04T10:20:52.561+0000",
"status": 500,
"error": "Internal Server Error",
"message": "Error: Role is not found.",
"path": "/api/auth/signup"
}

```

[REPLY](#)**bezkoder**

September 4, 2020 at 1:28 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4603>)

Hi, you should insert 3 rows into **roles** table first.

[REPLY](#)**Ricardo Miguel Barros Ferreira**

September 7, 2020 at 11:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4625>)

thanks

[REPLY](#)**Yogen Bhattachari**

September 9, 2020 at 9:14 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4658>)

Hi Bezkoder, Your codes really helped me alot .It is such a awesome code. I just loved it.

It was working fine earlier but recently i got this error while trying to login and i am stuck for a while :

"The signing key's size is 104 bits which is not secure enough for the HS512 algorithm. The JWT JWA Specification (RFC 7518, Section 3.2) states that keys used with HS512 MUST have a size \geq 512 bits (the key size must be greater than or equal to the hash output size). Consider using the io.jsonwebtoken.security.Keys class's 'secretKeyFor(SignatureAlgorithm.HS512)' method to create a key guaranteed to be



secure enough for HS512. See <https://tools.ietf.org/html/rfc7518#section-3.2>

(<https://tools.ietf.org/html/rfc7518#section-3.2>) for more information."

What may be the solution for this? Please help!

REPLY

Yogen Bhattacharai

September 11, 2020 at 9:11 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4685>)

The secret key i was giving was short length , i changed the secret key and it worked.Thanks!!!!

REPLY

Raj

September 12, 2020 at 4:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4691>)

the actual JWT implementation code, thanks a lot.

REPLY

LPT

September 14, 2020 at 1:37 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4703>)

Hi, Thank you a lot for this tutorial. But I have a problems when I run your project and it still ok. But I found on my eclipse log that:

io.jsonwebtoken.SignatureException: JWT signature does not match locally computed signature. JWT validity cannot be asserted and should not be trusted.

It has this error. Can you help me fix this

REPLY

Haba

September 16, 2020 at 11:54 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4740>)

Unauthorized error: Full authentication is required to access this resource . I got this error when try to accès to

this url : <http://localhost:8080/api/test/user> (<http://localhost:8080/api/test/user>)



[REPLY](#)**bezkoder**

September 16, 2020 at 12:04 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4741>)

Hi, please check the HTTP request Authorization Header. Also don't forget to login a user account to get the Token.

[REPLY](#)**Tal**

December 27, 2020 at 3:27 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5936>)

Hi, did you succeed?

[REPLY](#)**Minh**

September 17, 2020 at 7:33 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4761>)

hi bezkoder

- this is great tutorial, it's worked for me,. But can i ask:

+ Why do you have to create and use "SignupRequest" and "LoginRequest" for Signing Up and Login request, is it OK if use User entity for this purpose?

Many thanks for your help!

[REPLY](#)**bezkoder**

September 17, 2020 at 8:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4762>)

Hi, User entity is highly related to database model, while "SignupRequest" and "LoginRequest" stand for Http request data. That means, you can add or change data of the request body by changing "SignupRequest" and "LoginRequest" class, but the persistence of table in database (corresponding to User entity) should not be changed regularly.

[REPLY](#)

**Minh**

September 17, 2020 at 9:50 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4765>)

Hi bezkoker

yeah, i got it, thanks for your reply, wish you all the best and success

REPLY

**Jliv**

September 19, 2020 at 7:17 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4792>)

Hi,

```
private String parseJwt(HttpServletRequest request) {  
    String headerAuth = request.getHeader("Authorization");  
    System.out.println(request.getHeaderNames());  
  
    if (StringUtils.hasText(headerAuth) && headerAuth.startsWith("Bearer ")) {  
        return headerAuth.substring(7, headerAuth.length());  
    }  
    logger.error("Something went wrong! headerAuth = null: ", headerAuth);  
    return null;  
  
    headerAuth is null, that is my problem.. Any idea?
```

REPLY

**Savan Java**

September 19, 2020 at 8:51 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4793>)

APPLICATION FAILED TO START

Description:

Field userRepository in
com.bezkoder.springjwt.security.services.UserDetailsServiceImpl required a bean of type 'com.bezkoder.springjwt.repository.UserRepository' that could not be found.

The injection point has the following annotations:

- @org.springframework.beans.factory.annotation.Autowired(required=true)

Action:

Consider defining a bean of type 'com.bezkoder.springjwt.repository.UserRepository' in your configuration.

[REPLY](#)**Micko**

September 26, 2020 at 6:19 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4863>)

Excellent tutorial!

[REPLY](#)**Mihir**

October 5, 2020 at 8:09 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4929>)

Hi,

Excellent tutorial, easy to understand the concept.

I tried to implement the same, except that I do not want the signup page/utility. i.e. assume the user table will be populated by some other means. So I implemented everything as the tutorial except signup utility. When I try to login (signin) it fails even though record is fetched correctly.

2020-10-05 15:51:54.346 INFO 17544 — [nio-8071-exec-3]

com.example.controller.AuthController : Login....

2020-10-05 15:51:54.346 INFO 17544 — [nio-8071-exec-3]

com.example.controller.AuthController : User: mihir

..hibernate logs from user table fetched the row correctly.

..hibernate logs from role table to get the role correctly.

2020-10-05 15:51:54.750 WARN 17544 — [nio-8071-exec-3]

o.s.s.c.bcrypt.BCryptPasswordEncoder : Encoded password does not look like BCrypt

2020-10-05 15:51:54.759 ERROR 17544 — [nio-8071-exec-3]

c.b.iris.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials

Basically, I have simple text put it DB table for password column.

In Postman the body is as below:

```
{  
  "username": "mihir",  
  "password": "test"  
}
```

"test" is also saved (and returned in logs) from database.

What am I missing here?

[REPLY](#)**Jacky**

October 10, 2020 at 9:55 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4985>)

Hello. Why I can't reach localhost:8080/register nor any other link? It says: log shows: "Unauthorized error: Full authentication is required to access this resource". Hope you could help me. Thanks.

[REPLY](#)**bezkoder**

October 11, 2020 at 6:59 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-4992>)

Hi, you should check if http header is correct or not (Bearer for Spring Server and x-access-token for Node.js server)

[REPLY](#)**OswaldoMM**

October 14, 2020 at 1:43 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5034>)

Hi, thanks for this tutorial.

I'm in trouble, java throws an exception of 401:

08:41:37,931 ERROR [co.com.activacredito.AuthEntryPointJwt] (default task-2)

Unauthorized error: Bad credentials

I'm working with a simple login form with Thymeleaf and Spring Boot

What could it be?

Thank you!

[REPLY](#)**bezkoder**

October 15, 2020 at 2:40 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5040>)

Hi, please check if the HTTP request header has the correct Bearer Token.

[REPLY](#) ^

Jacky

October 16, 2020 at 1:36 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5057>)

If Admin has to access database, should I create in TestController several 'access' methods?

For example, if Admin has to access users and orders, should I create GetMapping for users and GetMapping for orders by two different methods? Thank you.

[REPLY](#)

ravindar

October 16, 2020 at 8:08 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5060>)

When i invoke the api(protected by jwt) through browser can i have a login form if yes please help on how?

[REPLY](#)

pap Malik

October 17, 2020 at 5:20 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5095>)

Hello, thanks for this tutorial it was very helpful !

but i wanted to do a Reset password with sending email using ur code but i had many problems

Can u take a look thanks

<https://stackoverflow.com/questions/64403483/how-can-i-change-modelandview-to-responseentity-in-controller-spring-security>

(<https://stackoverflow.com/questions/64403483/how-can-i-change-modelandview-to-responseentity-in-controller-spring-security>)

[REPLY](#)

Ana

October 21, 2020 at 6:31 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5143>)

Hello, thank you very much for sharing, excellent tutorial.

I did my project guiding me around here and it works fine for me except when I use the @PreAuthorize notation, it throws me the error:

Postman

{

"date": "2020-10-21T18:22:06.284+0000",



```
"code": 500,  
"message": "Internal server error",  
"description": "Access is denied",  
"details": []  
}
```

Console

```
2020-10-21 15:22:06.273 WARN 19507 — [nio-9091-exec-9]  
n.u.e.r.AEresponseEntityExceptionHandler : Exception.class -> (uri=/api/v1/users/4):  
Access is denied.  
2020-10-21 15:22:06.372 WARN 19507 — [nio-9091-exec-9]  
.m.m.a.ExceptionHandlerExceptionResolver : Resolved  
[org.springframework.security.access.AccessDeniedException: Access is denied]
```

Any ideas? Thanks

REPLY

Ana

October 23, 2020 at 6:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5169>)

Hi, it didn't work for me with @PreAuthorize ("hasRole ('ADMIN')") but it work for me with @PreAuthorize ("hasAuthority ('ADMIN')")

REPLY

Jacky

October 26, 2020 at 4:22 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5206>)

Would you mind showing your @PreAuthorize code?

REPLY

dev

October 26, 2020 at 8:53 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5202>)

Thank you

REPLY

Gala

October 30, 2020 at 1:48 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5244>)

Hello there,

First of all thank you so much for your tutorial, it is very clear and it helped me a lot !

The only question that remains for me is where are stored the tokens in this configuration ? Are they stored inMemory and if so, how could we change this aspect of your code ?

[REPLY](#)

egg

November 7, 2020 at 9:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5327>)

+1

Does someone has the answer to that question ? I am trying to had an api logout
Wonderful tutorial indeed

[REPLY](#)

Edgard

October 30, 2020 at 10:05 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5251>)

Hi ,very good tutorial! But i'm having trouble when I call "signup". Inside "doFilterInternal", after verify if "jwt != null && jwtUtils.validateJwtToken(jwt)", this line is called: "filterChain.doFilter(request, response)" and bring me back an Unauthorized error.

I don't understand what exactly do this line, can any one help me?

I think is important to say that I'm not passing any value on my header(besides the postman defaults). I see in the example above that the header has 9 fields, but mine has 8. Do I need to send something in my header when I'm siningUp?

[REPLY](#)

Edgard

October 30, 2020 at 10:22 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5252>)

here I have a better error description:InsufficientAuthenticationException,
messageDetails:"Full authentication is required to access this resource"

[REPLY](#) 

Black widow

November 3, 2020 at 2:55 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5273>)

Hi bezkoder !

Thanks a lot for this very good tutorial ! I am a beginner and this helped me a lot !

Now, I would like to add swagger-ui to my project and I have this error when I want to access to url localhost:8080/swagger-ui.html :

c.m.d.a.m.s.jwt.AuthEntryPointJwt : Unauthorized error: Full authentication is required to access this resource

I tried to add .antMatchers("/swagger-ui.html").permitAll() to WebSecurityConfig but it's the same... I know it's outside of this tutorial but maybe you can help me and tell me what do I need to edit to make it work ?

Thanks !

[REPLY](#)

Rohit

November 5, 2020 at 6:15 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5293>)

I have got the problem at the signup. All things seems good but not working. Please help.

```
{  
  "timestamp": "2020-11-05T06:04:19.643+00:00",  
  "status": 404,  
  "error": "Not Found",  
  "message": "No message available",  
  "path": "/api/auth/signup"  
}
```

[REPLY](#)

Rohit

November 7, 2020 at 1:35 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5316>)

Doing silly mistake that i cannot keep @RequestMapping("/api/auth").

Thank you for the great tutorial.

[REPLY](#)



David

November 13, 2020 at 1:28 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5386>)

Excellent guide! Bravo!

REPLY

Linh Tran

November 16, 2020 at 3:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5421>)

Hi,

I'm a beginner on spring security and JWT. I am so glad that I found your tutorial and I am following it now. It's really well explained with great structure. However, I am having a small problem with the post method for /signup.

When I ran the application in local and made a post request on endpoint /api/auth/signup, it returned a successful message. But when I checked the database, it shows empty cells on other columns of the table users apart from the id column.

id	email	password	username
6			
7			

(2 rows)

Do you think what could be the possible causes for this problem?

Many thanks in advance.

REPLY

bezkoder

November 17, 2020 at 2:06 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5429>)

Hi, you can check the body data with JSON format is correct or not.

REPLY

Linh Tran

November 17, 2020 at 9:00 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5433>)



Here is a sample of my body data with JSON format. Should be fine I think ?

```
{
  "username": "eduard",
  "email": "feliu06@gmail.com",
  "password": "12356547567",
  "role": ["user", "mod"]
}
```

[REPLY](#)

Arturo Mayorga

November 16, 2020 at 9:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5425>)

With this guide, there is no need of CSRF protection?

[REPLY](#)

Jasso jassinto

November 19, 2020 at 5:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5471>)

I suggest you all noobs to avoid ask low level questions since this man did not develop a low level API, just learn by yourselves all low level questions could be solved by google, trust me

I am sure that this quite polite gentleman developer want to help all of us, but it is annoying explaining all questions, he did a lot just sharing his code <3

[REPLY](#)

Manjunath

April 30, 2021 at 2:15 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8328>)

I do have same questions. Do I need to have CSRF protection enabled? Any additional checks required for CSRF?

[REPLY](#)

Jasso jassinto

November 19, 2020 at 5:47 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5470>)

Man you are those people with god level explanation, I was struggling with implementation in React at the auth states, i love you.

[REPLY](#)**Enrique Gordon**

November 19, 2020 at 8:34 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5472>)

Hola bezcoder , amazing tutorial. Applying your tutorial i did try to implement the process in my app , but keep, but trying to access the user data i got a anonymous user, thus i dont know what to do!

Any sugerence?

[REPLY](#)**bezkoder**

November 21, 2020 at 1:44 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5493>)

Hi, if you use Postman for HTTP Client, make sure that it sent data in Application/JSON.

[REPLY](#)**Enrique Gordon**

November 23, 2020 at 9:47 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5521>)

the point is the user get logged and all works fine .. if i check my login method service implementation all data is there .

When the user logs in the app works .

But when trying to access that logged user from other method in other class through SecurityContextHolder i got an anonymous user

Please help....a better idea i set here:

<https://stackoverflow.com/questions/64927997/how-to-receive-the-authenticated-user-from-springsecurity-in-other-service-imple>
[\(https://stackoverflow.com/questions/64927997/how-to-receive-the-authenticated-user-from-springsecurity-in-other-service-imple\)](https://stackoverflow.com/questions/64927997/how-to-receive-the-authenticated-user-from-springsecurity-in-other-service-imple)

Thanks in advance

[REPLY](#)

Enrique Gordon

November 23, 2020 at 9:50 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5522>)

And by the way really thanks for your tutorials.Amazing !!!!!

REPLY

Vikram Kumar

November 21, 2020 at 4:09 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5498>)

Hello bezkoder, i dont want signup page only i need is signin page so what should i change ithe source code

REPLY

lechat

November 22, 2020 at 10:02 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5512>)

Hello, thank you for your great tutorial.

I have one question. This part of code shouldn't return error code when validation is false?

This code does nothing even if validation fails.

```
try {  
    String jwt = parseJwt(request);  
    if (jwt != null && jwtUtils.validateJwtToken(jwt)) {  
        String username = jwtUtils.getUserNameFromJwtToken();  
        UserDetails userDetails = userDetailsService.loadUserByUsername(username);  
        UsernamePasswordAuthenticationToken authentication = new UsernamePasswordAuthenticationToken(userDetails, null, userDetails.getAuthorities());  
        authentication.setDetails(new WebAuthenticationDetailsSource());  
        SecurityContextHolder.getContext().setAuthentication(authentication);  
    }  
} catch (Exception e) {  
    logger.error("Cannot set user authentication: {}", e);  
}
```

REPLY ^

bezkoder

November 29, 2020 at 4:00 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5599>)

Hi, you can look at the next line after this block of code:

```
filterChain.doFilter(request, response);
```

Spring Security filter chain will validate and return error code automatically.

[REPLY](#)

Donatas

November 23, 2020 at 6:11 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5527>)

Hi, I have registered a new user with role "mod". When I sign in with it and calling a GET `http://localhost:8080/api/test/mod` (`http://localhost:8080/api/test/mod`) URL, I am getting an error in "postman"

```
{
  "timestamp": "2020-11-23T17:58:29.065+0000",
  "status": 401,
  "error": "Unauthorized",
  "message": "Error: Unauthorized",
  "path": "/api/test/mod"
}
```

Can you help me? I have taken this tutorial with git clone and I was doing everything step by step. Some people got into the same trouble above in comments but didn't get the answer.

Also, thanks for this tutorial. 10/10!

[REPLY](#)

bezkoder

November 24, 2020 at 1:53 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5534>)

Hi, first you need to signin the user. Then you must use Bearer Token from the response data of the signin request 😊

[REPLY](#)

Andres

December 15, 2020 at 11:00 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5808>)

Hi Bezkoder,

So that means that I need to login, but because there is no user created yet, I need to create the first one to login and to be able to get a token ?

If I do that, by curl it would be something like this ? (I think the confusion is because following the tutorial some of us assume that we can use the signup with no need for credentials...that make sense?, thank you.)

```
TOKEN=$(curl -s -X POST -H 'Accept: application/json' -H 'Content-Type: application/json' -d
'{"username":"{username}","password":"{password}","rememberMe":false}' https://(https://){hostname}/api/authenticate | jq -r '.id_token')

curl -H 'Accept: application/json' -H "Authorization: Bearer ${TOKEN}" -d
'name=the_name' -d
'email=the_name@example.com' https://(hostname)/api/myresource
```

[REPLY](#)

Robert

November 25, 2020 at 3:26 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5554>)

Hi, first of all I would like to say its great article, thank you for your effort.

I have one question: how to change login field to another field from User entity? E.g. I want to use email and password for login. How to force UsernamePasswordAuthenticationToken to get as principal email instead of username ?

[REPLY](#)

Brian

November 26, 2020 at 12:26 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5565>)

I'm getting the following error when running mvn spring-boot:run -debug
WARN 8120 — [main] ConfigServletWebServerApplicationContext : Exception encountered during context initialization – cancelling refresh attempt:
org.springframework.beans.factory.BeanCreationException: Error creating bean with name 'userRepository' defined in com.bezkoder.springjwt.repository.UserRepository defined in @EnableJpaRepositories declared on

JpaRepositoriesRegistrar.EnableJpaRepositoriesConfiguration: Cannot create inner bean '(inner bean)#6b2e46af' of type [org.springframework.orm.jpa.SharedEntityManagerCreator] while setting bean property 'entityManager'; nested exception is org.springframework.beans.factory.BeanCreationException: Error creating bean with name '(inner bean)#6b2e46af': Cannot resolve reference to bean 'entityManagerFactory' while setting constructor argument; nested exception is org.springframework.beans.factory.NoSuchBeanDefinitionException: No bean named 'entityManagerFactory' available

2020-11-26 07:14:03.393 INFO 8120 — [main] o.s.s.concurrent.ThreadPoolTaskExecutor : Shutting down ExecutorService 'applicationTaskExecutor'

2020-11-26 07:14:03.527 INFO 8120 — [main] o.apache.catalina.core.StandardService : Stopping service [Tomcat]

2020-11-26 07:14:03.580 INFO 8120 — [main] ConditionEvaluationReportLoggingListener :

Error starting ApplicationContext. To display the conditions report re-run your application with 'debug' enabled.

2020-11-26 07:14:03.595 ERROR 8120 — [main] o.s.b.d.LoggingFailureAnalysisReporter :

APPLICATION FAILED TO START

Description:

A component required a bean named 'entityManagerFactory' that could not be found.

Action:

Consider defining a bean named 'entityManagerFactory' in your configuration.

[INFO] -----
[INFO] BUILD FAILURE

REPLY

Brian

November 26, 2020 at 12:36 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5566>)

Looks like to fix the issue I posted previously:

Description: A component required a bean named 'entityManagerFactory' that could not be found. Action: Consider defining a bean named 'entityManagerFactory' in your configuration. [INFO] ^

I needed to delete the org.hibernate directory from my local maven repository (.m2)

[\(https://stackoverflow.com/questions/54825926/spring-boot-2-1-entitymanagerfactory-bean-could-not-be-found\)](https://stackoverflow.com/questions/54825926/spring-boot-2-1-entitymanagerfactory-bean-could-not-be-found)

[REPLY](#)**Rico**

November 26, 2020 at 4:05 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5572>)

hello bezcoder ,thank you for this amazing tutorial !! but if i want to add new class (Employee) and make this class as a User .. what i have to do ..should i use inheritance or relationship between them ?

[REPLY](#)**fero**

November 27, 2020 at 8:31 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5587>)

Hello BezKoder, how can i update (put) user_role table in postman?

[REPLY](#)**ahmad**

December 3, 2020 at 12:15 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5630>)

Hi,

I cloned your code and the frontend too

it works fine

I added a user made him an admin and mod and user

and was added successfully but when I sign in and click on user or admin board they both say UNAUTHORIZED

although im signed in

why is that?

[REPLY](#)**bezkoder**

December 3, 2020 at 2:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5631>)

Hi, please make sure that you used Bearer token on Authorization header.

REPLY

andres

December 9, 2020 at 8:45 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5704>)

Hi, I followed the tutorial, it runs but the tables are not being created.

I already tested the connection to postgres, checkt in the browser for the login. Everithing looks good but the tables are not being created, I changed the spring.jpa.hibernate.ddl-auto to create but still nothing.

I apreciate any guidance, thanks.

REPLY

Aliza

December 10, 2020 at 10:39 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5713>)

Thank you for this excellent tutorial! I was getting lost with other more complex tutorials and having trouble understanding how everything connected, but when I followed this one my authentication worked.

REPLY

Andres

December 15, 2020 at 7:57 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5805>)

Hi, Aliza, did you tested

<http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>)

with

```
{  
  "username": "mod",  
  "email": "mod@bezkoder.com",  
  "password": "12345678",  
  "role": ["mod", "user"]  
}
```



with postman I am getting 401 unauthorized, this happend to you ?

[REPLY](#)**Timati**

December 28, 2020 at 2:18 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5953>)

Hi, thank you for the very detailed tutorial!

Have a question:

Why you user 'parseClaimsJws' in function validateJwtToken of JwtUtils class instead of 'parseClaimsJwt'?

[REPLY](#)**Flukii**

December 16, 2020 at 12:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5814>)

Thanks for this amazing tutorial. It was really easy to understand it.

I have a question, If I have a case that some users (from the database) require password from the database or some user required password from Ldap. Can you give me a hint?

[REPLY](#)**carmen**

December 21, 2020 at 10:01 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5875>)

I'm thoroughly enjoying your tutorial. I'm still new to the whole thing about Spring Boot and you made my day.

Thanks a lot!

[REPLY](#)**PedroGuacamole**

December 27, 2020 at 8:52 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5940>)

You can't even imagine how grateful I am to you! Great tutorial!

[REPLY](#) 

nawfel bougrine

December 28, 2020 at 7:24 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5959>)

good evening, i did exactly the same as you but when i run my application i get the following error:

```
sun.misc.Unsafe.park(Native Method)
java.util.concurrent.locks.LockSupport.parkNanos(LockSupport.java:215)
java.util.concurrent.locks.AbstractQueuedSynchronizer$ConditionObject.awaitNanos(
AbstractQueuedSynchronizer.java:2078)
java.util.concurrent.ScheduledThreadPoolExecutor$DelayedWorkQueue.take(Schedul
edThreadPoolExecutor.java:1093)
java.util.concurrent.ScheduledThreadPoolExecutor$DelayedWorkQueue.take(Schedul
edThreadPoolExecutor.java:809)
java.util.concurrent.ThreadPoolExecutor.getTask(ThreadPoolExecutor.java:1067)
java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1127)
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
java.lang.Thread.run(Thread.java:745)

2020-12-28 20:20:04.631 WARN 44708 — [ main] o.a.c.loader.WebappClassloaderBase
: The web application [ROOT] appears to have started a thread named [HikariPool-1
connection adder] but has failed to stop it. This is very likely to create a memory leak.
Stack trace of thread:
sun.misc.Unsafe.park(Native Method)
java.util.concurrent.locks.LockSupport.parkNanos(LockSupport.java:215)
java.util.concurrent.locks.AbstractQueuedSynchronizer$ConditionObject.awaitNanos(
AbstractQueuedSynchronizer.java:2078)
java.util.concurrent.LinkedBlockingQueue.poll(LinkedBlockingQueue.java:467)
java.util.concurrent.ThreadPoolExecutor.getTask(ThreadPoolExecutor.java:1066)
java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1127)
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
java.lang.Thread.run(Thread.java:745)

2020-12-28 20:20:04.633 WARN 44708 — [ main]
ConfigServletWebServerApplicationContext : Exception encountered during context
initialization – cancelling refresh attempt:
org.springframework.context.ApplicationContextException: Unable to start web
server; nested exception is
org.springframework.boot.web.server.WebServerException: Unable to start
embedded Tomcat

2020-12-28 20:20:04.634 INFO 44708 — [ main] com.zaxxer.hikari.HikariDataSource :
HikariPool-1 – Shutdown initiated...

2020-12-28 20:20:04.642 INFO 44708 — [ main] com.zaxxer.hikari.HikariDataSource :
HikariPool-1 – Shutdown completed.

2020-12-28 20:20:04.666 INFO 44708 — [ main]
ConditionEvaluationReportLoggingListener :
```



Error starting ApplicationContext. To display the conditions report re-run your application with 'debug' enabled.

2020-12-28 20:20:04.694 ERROR 44708 — [main]

o.s.b.d.LoggingFailureAnalysisReporter :

APPLICATION FAILED TO START

Description:

An attempt was made to call a method that does not exist. The attempt was made from the following location:

org.hibernate.validator.internal.engine.ValidatorFactoryImpl.
(ValidatorFactoryImpl.java:153)

The following method did not exist:

javax.validation.spi.ConfigurationState.getParameterNameProvider()Ljavax/validation/
ParameterNameProvider;

The method's class, javax.validation.spi.ConfigurationState, is available from the following locations:

jar:file:/C:/Users/hp/.m2/repository/javax/validation/validation-api/1.0.0.GA/validation-api-1.0.0.GA.jar!/javax/validation/spi/ConfigurationState.class
jar:file:/C:/Users/hp/.m2/repository/jakarta/validation/jakarta.validation-api/2.0.2/jakarta.validation-api-2.0.2.jar!/javax/validation/spi/ConfigurationState.class

The class hierarchy was loaded from the following locations:

javax.validation.spi.ConfigurationState:
file:/C:/Users/hp/.m2/repository/javax/validation/validation-api/1.0.0.GA/validation-api-1.0.0.GA.jar

Action:

Correct the classpath of your application so that it contains a single, compatible version of javax.validation.spi.ConfigurationState

can someone help me please ?

REPLY

bezkoder

December 29, 2020 at 1:59 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5965>)



Hi, first remove in your repository maven the directory hibernate and then make a `maven clean install` to reimport correctly your dependencies.

[REPLY](#)

Yoesoff

December 30, 2020 at 4:35 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5990>)

Hi, I am wondering why your signin response is different compared mine, here is my signin response result:

```
{
    "token": "eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ1c2VyMSIsImhlhdCI6MTY",
    "type": null,
    "id": 5,
    "username": "user1",
    "email": "user1@gmail.com",
    "roles": [
        "ROLE_USER"
    ]
}
```

My type is always returns null “type”: null, (where did you define tokenType and accessToken?)

[REPLY](#)

bezkoder

December 30, 2020 at 8:16 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-5993>)

Hi, you can find `type = "Bearer"` in `payload/response/JwtResponse.java`:

```
public class JwtResponse {
    private String token;
    private String type = "Bearer";
    private Long id;
    ...
}
```

[REPLY](#)

ZAYLDGIAN S ROSETE

January 1, 2021 at 8:41 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6025>)

Hi, This tutorial was very helpful to me. Thank you!

REPLY

Shiro

January 4, 2021 at 7:15 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6076>)

Thank you for this tutorial. It was really easy to understand it.

Can you upload a video or code on forgetting password in this code?

REPLY

hung

January 5, 2021 at 6:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6091>)

Just desire to say your Spring Boot tutorial is amazing!

REPLY

JOSHUA

January 9, 2021 at 5:14 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6132>)

Thanks a lot for the detailed explanation.

Please if I want to use this as an auth server micro service, how do I go about that?

Thanks

REPLY

Peter

January 11, 2021 at 10:36 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6178>)

This was Very Helpful! Thank You So Much!!!!

REPLY



Eddie

January 24, 2021 at 9:35 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6507>)

Hi, I have the following error when trying POST signup request:

2021-01-24 16:32:42.688 ERROR 1136 — [nio-9095-exec-9]

c.e.s.security.jwt.AuthEntryPointJwt : Unauthorized error: Full authentication is required to access this resource

2021-01-24 16:33:24.495 ERROR 1136 — [nio-9095-exec-2] o.a.c.c.C.[.][/].

[dispatcherServlet] : Servlet.service() for servlet [dispatcherServlet] in context with path [] threw exception

org.springframework.security.web.firewall.RequestRejectedException: The request was rejected because the URL contained a potentially malicious String "//" at

org.springframework.security.web.firewall.StrictHttpFirewall.rejectedBlocklistedUrls(StrictHttpFirewall.java:456) ~[spring-security-web-5.4.2.jar:5.4.2]

at

org.springframework.security.web.firewall.StrictHttpFirewall.getFirewalledRequest(StrictHttpFirewall.java:429) ~[spring-security-web-5.4.2.jar:5.4.2]

at

org.springframework.security.web.FilterChainProxy.doFilterInternal(FilterChainProxy.java:196) ~[spring-security-web-5.4.2.jar:5.4.2]

at

org.springframework.security.web.FilterChainProxy.doFilter(FilterChainProxy.java:183) ~[spring-security-web-5.4.2.jar:5.4.2]

at

org.springframework.web.filter.DelegatingFilterProxy.invokeDelegate(DelegatingFilterProxy.java:358) ~[spring-web-5.3.3.jar:5.3.3]

at

org.springframework.web.filter.DelegatingFilterProxy.doFilter(DelegatingFilterProxy.java:271) ~[spring-web-5.3.3.jar:5.3.3]

at

org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:193) ~[tomcat-embed-core-9.0.41.jar:9.0.41]

at

org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:166) ~[tomcat-embed-core-9.0.41.jar:9.0.41]

at

org.springframework.web.filter.RequestContextFilter.doFilterInternal(RequestContextFilter.java:100) ~[spring-web-5.3.3.jar:5.3.3]

at

org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequestFilter.java:119) ~[spring-web-5.3.3.jar:5.3.3]

at

org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain

^

```
.java:193) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:16
6) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.springframework.web.filter.FormContentFilter.doFilterInternal(FormContentFilter.j
ava:93) ~[spring-web-5.3.3.jar:5.3.3]
at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequestFilter.ja
va:119) ~[spring-web-5.3.3.jar:5.3.3]
at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain
.java:193) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:16
6) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.springframework.web.filter.CharacterEncodingFilter.doFilterInternal(CharacterEnc
odingFilter.java:201) ~[spring-web-5.3.3.jar:5.3.3] at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequestFilter.ja
va:119) ~[spring-web-5.3.3.jar:5.3.3]
at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain
.java:193) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:16
6) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:2
02) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:97)
~[tomcat-embed-core-9.0.41.jar:9.0.41]
at
org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBase.java:5
42) ~[tomcat-embed-core-9.0.41.jar:9.0.41]
at org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:143) ~
[tomcat-embed-core-9.0.41.jar:9.0.41]
at org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:92) ~
[tomcat-embed-core-9.0.41.jar:9.0.41]
at org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.java:78)
~[tomcat-embed-core-9.0.41.jar:9.0.41]
at org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:343) ~
[tomcat-embed-core-9.0.41.jar:9.0.41]
```



```
at org.apache.coyote.http11.Http11Processor.service(Http11Processor.java:374) ~  
[tomcat-embed-core-9.0.41.jar:9.0.41]  
at org.apache.coyote.AbstractProcessorLight.process(AbstractProcessorLight.java:65)  
~[tomcat-embed-core-9.0.41.jar:9.0.41]  
at  
org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtocol.java:  
888) ~[tomcat-embed-core-9.0.41.jar:9.0.41]  
at  
org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.java:159  
7) ~[tomcat-embed-core-9.0.41.jar:9.0.41]  
at org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java:49)  
~[tomcat-embed-core-9.0.41.jar:9.0.41]  
at  
java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:  
1128) ~[na:na]  
at  
java.base/java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.ja  
va:628) ~[na:na]  
at  
org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:6  
1) ~[tomcat-embed-core-9.0.41.jar:9.0.41]  
at java.base/java.lang.Thread.run(Thread.java:834) ~[na:na]
```

2021-01-24 16:33:24.547 ERROR 1136 — [nio-9095-exec-2]

c.e.s.security.jwt.AuthEntryPointJwt : Unauthorized error: Full authentication is required to access this resource

Would you please tell me what am I missing?

Thanks!

REPLY

Eddie

January 24, 2021 at 9:46 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6509>)

No worry, I figure it out. The issue is I am having // (instead of /) from my Post endpoint url. After correcting, everything is working.

REPLY

kapil

January 30, 2021 at 9:18 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6697>)

Signup: <http://localhost:8080/signup> (<http://localhost:8080/signup>)

body:- {

```
"username": "kapil",
"email": "kapil@test.com",
"password": "12345",
"role": [
    "ROLE_ADMIN"
]
```

Response:-

```
{
    "timestamp": "2021-01-30T21:15:37.537+00:00",
    "status": 401,
    "error": "Unauthorized",
    "message": "Error: Unauthorized",
    "path": "/signup"
}
```

REPLY

bezkoder

January 31, 2021 at 12:09 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-6699>)

Hi, it should be: "role" : ["admin"] 😊

REPLY

Vazgen

February 26, 2021 at 7:44 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7270>)

what about payload package. i am beginner and dont know what will request and what response. please provide me

REPLY

bezkoder

February 27, 2021 at 10:08 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7289>)



Hi, just think payload as the content (or data) of http request/response 😊

[REPLY](#)**xcalib**

February 28, 2021 at 11:17 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7306>)

Great tutorial, thanks so much!

Wondering what's the difference between the following types of exports:

export default new AuthService() vs export default App?

[REPLY](#)**khouloud yengui**

March 3, 2021 at 2:44 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7363>)

hello , thank you for these great tutorial .

I changed in application.properties file :

spring.datasource.url=jdbc:mysql://localhost:3306/testdb?serverTimezone=UTC

spring.datasource.username=root

spring.datasource.password=

spring.datasource.driver-class-name= com.mysql.cj.jdbc.Driver

spring.jpa.database= MYSQL

spring.jpa.show-sql=true

spring.jpa.hibernate.ddl-auto=update

spring.jpa.properties.hibernate.dialect= org.hibernate.dialect.MySQL55Dialect

spring.jpa.open-in-view=false

App Properties

bezkoder.app.jwtSecret= bezKoderSecretKey

bezkoder.app.jwtExpirationMs= 86400000

so the tables were generated automatically and i can open my database with

phpMyAdmin ,but when i tried to send this request

<http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>) in

Postman, i have this error :

POST <http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>)

Error: connect ECONNREFUSED 127.0.0.1:8080

Request Headers

Content-Type: application/json

User-Agent: PostmanRuntime/7.26.8

Accept: */*

Cache-Control: no-cache



Postman-Token: bd8240e4-e192-41bb-9b10-477b324d7e0e

Host: localhost:8080

Accept-Encoding: gzip, deflate, br

Connection: keep-alive

Request Body

{

 "username": "mod",

 "email": "mod@bezkoder.com",

 "password" :"1234",

 "role": ["mod", "user"]

}

can you help me please ?

REPLY

mountin

March 14, 2021 at 2:56 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7589>)

Hallo Bezkoder ...

It greats tutorial, thanks a lot for your sharing.

I have a silly questions but it make me confuse. User have 1 role, Moderator have 2 roles , and Admin have only 1 roles. Where I must set it? How do I set Admin with 3 roles ?

Thank you in advance

REPLY

sathiyaraj

March 21, 2021 at 7:17 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7697>)

Resolved [org.springframework.web.HttpMediaTypeNotAcceptableException: Could not find acceptable representation]

REPLY

tan

March 22, 2021 at 7:31 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7713>)



Hi.

I'm having this issue like when I try to fetch details roles are not coming. I'm getting an empty array. kindly help if someone knows how to resolve this issue.

Thanks in advance

REPLY

bezkoder

March 23, 2021 at 8:05 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7718>)

Hi, you should use SQL to create 3 records in `roles` table first.

REPLY

Mayur Kandalkar

March 23, 2021 at 2:24 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7727>)

Thank you so much. I have got so much to learn.

REPLY

Sofia

March 26, 2021 at 3:01 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7762>)

Hi! Thanks for this awesome tutorial!

I have an issue with the `http://localhost:8080/api/auth/signin` (`http://localhost:8080/api/auth/signin`). I have created the roles in the role table and I was able to create some users from `http://localhost:8080/api/auth/signup` (`http://localhost:8080/api/auth/signup`). The problem comes when I want to sign in. I create an user with the following parameter -> `{"username": "admin", "email": "admin@admin.com", "password": "admin", "role": ["admin", "mod", "user"]}` and then when I tried to sign in with `"username": "admin"` and `"password": "admin"` I have a 415 Unsupported Media Type.

I'm sure I am using the POST method, and I tried to change from `application/json` to `application/x-www-form-urlencoded` with no success.

If you can help me I will be very thankful!

Thanks anyway for this great tutorial. Your GitHub was very helpful



REPLY

korn

March 26, 2021 at 9:57 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-7766>)

Hello, I have a questioned why you picked relatively old lib jjwt from Jul, 2018 ?

Any reason behind that?

I see as I assume continuation of this lib but nobody uses it:

<https://mvnrepository.com/artifact/io.jsonwebtoken/jjwt-root>

(<https://mvnrepository.com/artifact/io.jsonwebtoken/jjwt-root>)

Any thoughts?

REPLY

Duy

April 12, 2021 at 11:55 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8053>)

My user not have enabled column and when i try to login, server said that can not authorization cause no enabled column, so how to get over it

REPLY

Anil

April 13, 2021 at 8:35 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8074>)

Hi Sir,

I am getting below issue while signup user:

```
{  
  "timestamp": "2021-04-13T08:33:24.035+00:00",  
  "status": 401,  
  "error": "Unauthorized",  
  "path": "/app/auth/signup"  
}
```

can you please help...

REPLY

deneme

April 13, 2021 at 11:58 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8075>)

I did everything the same but I get this error when I try to login

2021-04-13 14:56:47.174 WARN 105872 — [nio-8080-exec-2]

o.s.s.c.bcrypt.BCryptPasswordEncoder : Encoded password does not look like BCrypt

2021-04-13 14:56:47.187 ERROR 105872 — [nio-8080-exec-2]

c.a.A.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials

[REPLY](#)

bennie

April 15, 2021 at 11:53 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8109>)

Howdy! This post could not be written much better!

Reading through this tutorial helps me alot about Spring Security with JWT!

Thanks for sharing!

[REPLY](#)

Kerim

April 17, 2021 at 5:27 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8141>)

Hi man thanks , it was realy a nice tutorial ,but i need help i tested the /signup post request it did worked and i checked my data Base it was implemented with a user but when i try /signin with the same user that i just did i got {

“timestamp”: “2021-04-17T05:12:02.331+00:00”,

“status”: 401,

“error”: “Unauthorized”,

“message”: “”,

“path”: “/pcd/auth/signin”

}

ps: i changed the path to (“/pcd/auth/**”).permitAll() in the webConfig the Jwt token is not generating its directly rendering into Authentication Entry point and displaying the message pleaase help

[REPLY](#)

Kerim

April 18, 2021 at 10:29 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8167>)

hi i resolved it thanks :DDD

[REPLY](#) ^

Tega

June 18, 2021 at 11:04 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9155>)

Hello, please how did you resolve this. Thanks

REPLY

Asam Alabdalah

August 28, 2021 at 12:24 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-11320>)

Hello, please how did you resolve this. Thanks

REPLY

Ali s

April 18, 2021 at 7:17 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8166>)

Hi M8!

Great tutorial!

just one thing my spring runs fine and finds my database and all.

It just does not add any tables to it at all.

Any idea why?

I get no error messages.

Kind regards

REPLY

Tega

June 18, 2021 at 11:10 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9156>)

You should set hibernate ddl to create, or update. See the code below

`spring.jpa.hibernate.ddl-auto = update`

REPLY

Dominik

April 19, 2021 at 8:55 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8178>)



I got that error after sending

```
{
  "username": "mod",
  "email": "mod@gmail.com",
  "password": "12345",
  "role": ["mod", "user"]
}
```

to POST <http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>) by Postman

and im getting this kind of error

```
{
  "timestamp": "2021-04-19T08:47:32.067+00:00",
  "status": 415,
  "error": "Unsupported Media Type",
  "message": "",
  "path": "/api/auth/signup"
}
```

[REPLY](#)

bezkoder

April 19, 2021 at 11:10 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8180>)

Hi, you should set `Content-Type: application/json` in your HTTP request Header.

[REPLY](#)

Alex

April 26, 2021 at 2:03 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8285>)

Hello,

I always get 401 Full Authentication required when trying to get any protected resource. I have the Authorization Header and the Token on all requests, also the application-type JSON headers I still always get the error, both from Angular and from Postman.

Please help me I need to implement this for a university project and your tutorial is the best I've found, but it just doesn't work properly



[REPLY](#)

bezkoder

April 27, 2021 at 3:16 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8289>)

Hi, please make sure that you have 'Bearer ' string as prefix of the token.

[REPLY](#)

Alex

April 27, 2021 at 8:23 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8291>)

I have it, still have the same error.

I think it's a problem with creating the authentication, maybe there's something that needs to be changed with the security config. The authentication seems to never be created and sending the token does nothing unfortunately.

[REPLY](#)

Alex

April 27, 2021 at 8:56 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8292>)

UPDATE:

I found the problem. For anyone else having this problem:

Make sure you DON't add @Order(Ordered.HIGHEST_PRECEDENCE) to the security config or any of the jwt classes. I added it to avoid some error from csrf, but it ended up ruining the authentication.

[REPLY](#)

Loic-tech

April 30, 2021 at 2:27 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8329>)

very Brilliant !!!!

[REPLY](#)

Karol

May 13, 2021 at 6:56 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8520>)

It has been best guide I have ever seen in my entire life! Great staff. Clearly explained.

REPLY

Syed

May 16, 2021 at 7:37 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8574>)

Hello...,

For sign in purpose....,

Instead of UserName can we use email ID for sign in.....

REPLY

Mine

May 24, 2021 at 8:07 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8684>)

Hello, when I create a constructor in the sign in section return `JwtResponse` , what will the String correspond to jwt?

```
@PostMapping("/signin")
    public ResponseEntity authenticateUser(@Valid @RequestBody Loc
```

1

```
        userDetailsService.getUsername(),
        userDetailsService.getPassword(),
        roles));
    }
```



```
public class JwtResponse {  
    private String token;  
    private String type = "Basic";  
    private String username;  
    private String password;  
    private List roles;  
    public JwtResponse(String jwt, String username, String passwo  
  
        .....=jwt  
        this.username = username;  
        this.password = password;  
        this.roles = roles;  
    }  
}
```

REPLY**Huginn**

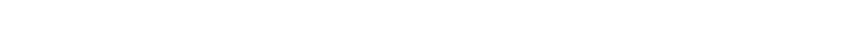
May 25, 2021 at 11:22 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8709>)

hello man why are the data not saved on the my db? I use the oracle 19c! after registration, no data is saved

REPLY**bezkoder**

May 27, 2021 at 8:06 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8733>)

Hi, the source code configuration works with MySQL database, not Oracle. So you need to use Oracle dependency in *pom.xml* and configure data source and hibernate in *application.properties* file 😊

REPLY**Vexees**

May 31, 2021 at 3:58 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-8789>)

Hi Bezkoder,



First of all, thank you for your tutorial, it's very clear !

Do you plan to do a tutorial on the back and/or front side which present how to manage the users table ?

From a production perspective, to my mind, it would complete this series of tutorials (The superuser would be admin which can manage moderators and users)

Thank you!

REPLY

Victor

June 12, 2021 at 4:10 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9038>)

Hi bezkoder, I have implemented the application and everything works fine in oracle DB 12c but there is a problem. I can successfully register user from postman and if I check my DB I can see the data saved including hashed password, when I try to login with the same credentials I get the error below:

`o.s.s.c.bcrypt.BCryptPasswordEncoder : Empty encoded password`

`v.i.crm.security.jwt.AuthEntryPointJwt : Unauthorized error: Bad credentials.`

Please help thanks.

REPLY

Matt

June 21, 2021 at 7:39 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9210>)

Hello, check my most recent comment below!

REPLY

JohnSnowbell

June 14, 2021 at 2:20 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9070>)

Hi Bezkoder,

Thank you for your tutorial!

I have an issue when I tried to register a new user into my database after a restart of the application.

On the first launch I registered 3 accounts : admin, mod and user. Then I restarted the app and I tried to register the user temp which gave me the following error : "query did not return a unique result: 2; nested exception is

`javax.persistence.NonUniqueResultException: query did not return a unique result: 2".`

I can't figure out how to solve this problem...



Thank you!

REPLY

Matt

June 17, 2021 at 4:18 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9139>)

Hey fellow tutorial followers,

I was also encountering this error:

`o.s.s.c.bcrypt.BCryptPasswordEncoder : Encoded password does not look like BCrypt`

I fixed it by changing the `passwordEncoder` method in the `WebSecurityConfig` from this:

```
@Bean  
public PasswordEncoder passwordEncoder() {  
    return new BCryptPasswordEncoder();  
}
```

to this:

```
@Bean  
public PasswordEncoder passwordEncoder() {  
    return PasswordEncoderFactories.createDelegatingPasswordEncoder()  
}
```

Hope this helps some people.

REPLY

Norwyn

August 18, 2021 at 3:40 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10967>)

I am getting this error after changing like you suggested

`java.lang.IllegalArgumentException: There is no PasswordEncoder mapped for the id "null"`

REPLY

Than

February 22, 2022 at 8:27 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19678>)

That is probably because you directly inserted your user data into the database. Therefore, the password is not encrypted. Use the signup API to create your user data.

[REPLY](#)**Ramil Yabbarov**

June 25, 2021 at 12:53 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9286>)

Hell, my IDEA ia angry about this: Field Injection is not Recommended
Can i ignore this, or please give example of Constructor injection

```
@Autowired  
UserDetailsServiceImpl userDetailsService;  
  
@Autowired  
@rivate AuthEntryPointJwt unauthorizedHandler;
```

[REPLY](#)**Rajeev**

June 27, 2021 at 3:09 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9312>)

```
{  
"username":"user",  
"password":"%&67#&46"  
}
```

I am sending encoded password how can we decode and validate and successfully login?

[REPLY](#)**Jafor Iqbal**

June 29, 2021 at 2:38 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9370>)

Thank you so much.

I must have to say that this is a great tutorial and nicely explained.



[REPLY](#)**Hanifa**

July 11, 2021 at 8:11 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-9538>)

Hello, thank you for your tutorial, it helps me a lot.

I want to ask, why you use Set instead of List for Roles mapping on user object? meanwhile, you convert it to list too...

[REPLY](#)**brian**

July 27, 2021 at 8:06 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10133>)

Awesome tut. Extremely comprehensive and easy to understand. Thanks!!!

[REPLY](#)**Noobie**

August 2, 2021 at 1:26 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10334>)

Hi bezkoder ,

Can you please help ? I received : Unauthorized error: Full authentication is required to access this resource for the signup API call to spring boot. This is the first initial sign up call. There should be no token available for the bearer during sign up right? Can please advise please?

.security.AuthEntryPointJwt

Unauthorized error: Full authentication is required to access this resource

[REPLY](#)**Noobie**

August 2, 2021 at 1:37 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10335>)

I solved it and to all my fellows peers looking for Full authentication is required to access this resource, i change the url to "/signup". You have to add this "url" to WebSecurityConfig class as well. Cheers

[REPLY](#)

symphorien

August 9, 2021 at 1:42 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10625>)

hi i have a problem!

all the requests that I make after my authentication do not go through in fact I do not have access to resources. all my API requests other than those from the Auth package do not pass authorization default.

REPLY

bezkoder

August 10, 2021 at 2:03 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10644>)

Hi, check your Authorization Header with Bearer prefix first.

REPLY

Sean (<http://sean.com>)

August 9, 2021 at 8:16 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10634>)

I have a classCastException when I use the UserDetailsImpl class for sign in request.

It is saying can not cast String to UserDetails interface.

REPLY

Suresh

August 14, 2021 at 9:41 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-10828>)

Hello bezkoder,

Thanks for the tutorial ! I have followed it, and application starts well, test data entered. When I try to sing up, I am getting a 401. Not sure what's wrong in my request, should be something small, someone reading this could also help to solve the issue, TIA !

URL – <http://localhost:8080/api/auth/signup> (<http://localhost:8080/api/auth/signup>)

Req – POST

Payload

{



```
"username":"testadmin",
"email":"email@gmail.com",
"password":"*****",
"role":["admin"]
}
```

[REPLY](#)**Asam Alabdalah**

August 28, 2021 at 12:28 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-11321>)

Hello, please how did you resolve this. Thanks

[REPLY](#)**Rafael Lima**

October 2, 2021 at 4:06 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-12924>)

Thanks for the tutorial. I had no problem at all!!

[REPLY](#)**Krutz**

October 7, 2021 at 1:01 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-13231>)

Thank you.

[REPLY](#)**Paolo**

October 12, 2021 at 9:05 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-13536>)

Hi, thank you for the excellent tutorial!

I have a problem, when I sign up/sign in with Postman all work well, but when I do a GET request to /api/test/..., I receive an UNEXPECTED ERROR, access denied, the error is on the line filterChain.doFilter(request, response); in AuthTokenFilter class, can you help me?

thank you

[REPLY](#)

bezkoder

October 13, 2021 at 3:28 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-13574>)

Hi, you can check the Authorization header with Bearer token.

REPLY

Jeff

October 19, 2021 at 8:37 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-14138>)

Great tutorial(s)!

Question around best practices. For the signup, could you also return a token or is it better to keep them separate and have the client app (angular in this case) call login after a successful signup?

Thanks!

REPLY

rahul

November 9, 2021 at 9:52 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-15042>)

can we use email instead of username to login using current method?

REPLY

Ritu

November 15, 2021 at 6:06 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-15270>)

what is "Bearer token" in header

when i call "localhost:8080/api/auth/signin" i am getting error;

"timestamp": "2021-11-15T06:07:11.934+00:00",

"status": 500,

"error": "Internal Server Error",

"path": "/api/auth/signin"

AuthTokenFilter->request:

org.springframework.security.web.header.HeaderWriterFilter\$HeaderWriterRequest@
22a6d

AuthTokenFilter->headerAuth: null

AuthTokenFilter->jwt: null

REPLY

pras

November 16, 2021 at 1:33 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-15288>)

Hi, very good article.

Can the roles get from database?

@PreAuthorize("hasRole('USER') or hasRole('MODERATOR') or hasRole('ADMIN')")

Thank you

REPLY

Eduardo

December 4, 2021 at 3:09 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-16189>)

Hi I'd like to know where dispatcherservlet fits in in that picture

REPLY

del bechir

December 14, 2021 at 5:18 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-16601>)

Hello Guys, Hope that y're fine!!

Firstly, I want to inform that my english isn't good, but Plz I will try to explain my problem like that:

After signin success, I have this Response



```
{
  "id": 1,
  "username": "mod",
  "email": "mod@gmail.com",
  "roles": [
    "ROLE_MODERATOR",
    "ROLE_USER"
  ],
  "accessToken": "eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJtb2QiLCJpYXQiOjE2Mzk0NTg3MDYsImV4cCI6MTYzOTU0NTEwNn0.uee5gH2HX9R8Wdxp7xP2cNMXPi3uRVsFgmdGVzG77QQsxL9AUffwT3W_RTyWaoKHCTyfPKr8KuvNaoJQNz_-nA",
  "tokenType": "Bearer"
}
```

But when I want to access to the mod or user content, I'm not able to see it!!

Response of access:

```
{
  "path": "/api/test/mod",
  "error": "Unauthorized",
  "message": "Full authentication is required to access this resource",
  "status": 401
}
```

I also note that on my logger console, i have this message “Unauthorized error: Full authentication is required”

Plz, I have done the tutorial several times, but I don't see where is the problem
Regards,

[REPLY](#)

bezkoder

December 14, 2021 at 9:44 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-16612>)

Hi, you can check your HTTP Authorization Headers with Bearer Token. IT should be:

Bearer eyJhbGciOiJ...

[REPLY](#)

del bechir

December 16, 2021 at 5:48 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-16678>)

Thanks for your answer!

It works now..

REPLY

chetanpail

March 21, 2022 at 12:59 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-20479>)

where exactly must we see this http authorization header please

REPLY

Bhumika

January 22, 2022 at 7:53 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-18617>)

Hi,

I have implemented the above for my project . I need to write test cases but am getting "Error :unauthorised" ,which I think is coming security/jwt/AuthEntryPointJwt.java.

I have annotated other end points with @PreAuthorize("hasRole('XYZ')") .

What should I mock to avoid this error ?

REPLY

Plibr

February 2, 2022 at 1:50 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19042>)

Hi, bezkoder, useful tut!

What about adding next entities to this REST API?

For example, adding that <https://www.bezkoder.com/spring-boot-file-upload/> (<https://www.bezkoder.com/spring-boot-file-upload/>) to this auth app

1. We should add "token: xxxxxxxxxxxxxxxx" to request body, and that's enough?

2. What kind of checking process we should follow for token confirmation in Controller before any endpoint getting handled?

Thanks a lot?

REPLY ^

Dhazki

February 8, 2022 at 10:56 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19239>)

Thank you for great example, but i can't find, where the configuration for "Forbidden" error handling class?

[REPLY](#)**Bogo**

February 14, 2022 at 9:54 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19454>)

I have the same question!

[REPLY](#)**avinash**

February 13, 2022 at 5:53 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19422>)

thank you so much so nicely instructed.

[REPLY](#)**Witcher**

February 16, 2022 at 2:13 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19523>)

Hi!

Thank you for your tutorial it helped me a lot!
Would it be possible from your side to guide me with some additional case related to this tutorial? I want to create put request – editing username. I was trying to do something like this:



```

@PutMapping("/usernameupdate/{id}")
public ResponseEntity updateUsername(@PathVariable("id") long
    Optional user = userRepository.findById(id);
    if (userRepository.existsByUsername(usernameUpdateRequest
        return ResponseEntity
            .badRequest()
            .body(new MessageResponse("Error: Username is
    }
    else{
        user.setUsername(usernameUpdateRequest.getUsername())
            return ResponseEntity
                .body(new MessageResponse("Username is updated
    }
}

```

but i have issues. I added usernameUpdateRequest class and added findById in userrepo. Problem is, that findById returns User instead of user and it complicates the whole thing. Best regards!

[REPLY](#)

Kai

February 21, 2022 at 3:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19659>)

(My English is not very well.)

I got the token = "undefined" issue too.

And I compared all the code between my code and this example code.

I found this.

I use lombok in my project.

In the "public class JwtResponse".

It use different name of the

"private String token;"

but constructor use below:

///

```

public JwtResponse(String accessToken, Long id, String username, String email, List
roles) {
    this.token = accessToken;
    this.id = id;
    this.username = username;
    this.email = email;

```



```
this.roles = roles;
}
///
```

I remove the lombok and use the same code with the example.
or I keep my lombok and change my field name from "private String token;" to "private String accessToken;".
Both can resolve my problem.

Hope it will help.

[REPLY](#)

hunter

March 1, 2022 at 1:21 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19817>)

hello and thx for this tuto.

After signin up and signing in (as admin) i've got this token
 "eyJhbGciOiJIUzUxMiJ9.eyJzdWliOijhZG1pbilsImIhdCI6MTY0NjEzOTg2NywiZXhwIjoxNjQ
 2MjI2MjY3fQ.Yc14R2gDZWIPQmxmRQ4TnPpj73el8pv-QTovuHZVEff_-
 otD8Wkeso6OVn6xYm5LgihiqtNp_RTExCZmCp_UA"
 when i tried to access to "localhost:8080/api/test/admin" with value "Bearer
 eyJhbGciOiJIUzUxMiJ9.eyJzdWliOijhZG1pbilsImIhdCI6MTY0NjEzOTg2NywiZXhwIjoxNjQ
 2MjI2MjY3fQ.Yc14R2gDZWIPQmxmRQ4TnPpj73el8pv-QTovuHZVEff_-
 otD8Wkeso6OVn6xYm5LgihiqtNp_RTExCZmCp_UA" i've got 403 Forbidden error
 Any help please

[REPLY](#)

bezkoder

March 2, 2022 at 2:19 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-19841>)

Hi, you need to add "Bearer [token]" on your HTTP request Authorization header.

[REPLY](#)

M.Nizar

March 9, 2022 at 8:49 am (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-20085>)

Hi, thanks for this helpful tutorial, my question is about disabling csrf (...csrf().disable).
 By using spring boot security with JWT, do we need to disable csrf? isn't my application

vulnerable to csrf attacks by doing so? If not is it vulnerable to XSS attacks and how can I protect it ?

[REPLY](#)**nahom**

April 11, 2022 at 1:06 pm (<https://www.bezkoder.com/spring-boot-jwt-authentication/#comment-20974>)

hi bezkoder i really enjoy your content on spring jwt authentication. bless you bro.

[REPLY](#)**Leave a Reply**

Your email address will not be published. Required fields are marked *

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[◀ React Firebase CRUD with Realtime Database](https://www.bezkoder.com/react-firebase-crud/) (<https://www.bezkoder.com/react-firebase-crud/>)



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TOOLS

Json Formatter (<https://www.bezkoder.com/json-formatter/>)



(<https://www.dmca.com/Protection/Status.aspx?ID=3f543dd5-c6d8-4208-9a6b-0e92057fd597&refurl=https://www.bezkoder.com/spring-boot-jwt-authentication/>)



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