Jwt Authentication Entry Point

Path: com.opus.backend.config.JwtAuthenticationEntryPoint.class

This class implements the **AuthenticationEntryPoint** interface from Spring Security. This class is used to handle authentication exceptions when the user tries to access a protected resource without proper authentication.

1. **@Component**: This annotation is used to mark this class as a Spring component, which means Spring's component-scanning mechanism will automatically detect and instantiate it as a bean in the application context.
2. **implements AuthenticationEntryPoint, Serializable**: The class implements the **AuthenticationEntryPoint** interface, which provides a single method **commence()** that is called when an unauthenticated user attempts to access a protected resource. The class also implements **Serializable**, allowing instances of this class to be serialized and deserialized.
3. **private static final long serialVersionUID = -7858869558953243875L;**: This field is used to define a unique identifier for the class, which is used during the serialization and deserialization process.
4. **public void commence(HttpServletRequest request, HttpServletResponse response, AuthenticationException authException) throws IOException**: This method is an implementation of the **commence()** method from the **AuthenticationEntryPoint** interface. It takes in three arguments:
   * **HttpServletRequest request**: The incoming HTTP request.
   * **HttpServletResponse response**: The HTTP response that will be sent back to the client.
   * **AuthenticationException authException**: The authentication exception that occurred during the authentication process.

Inside the **commence()** method, the following actions are performed:

a. **response.setStatus(401);**: Sets the response status code to 401 (Unauthorized).

b. **response.setContentType("application/json");**: Sets the response content type to "application/json".

c. **PrintWriter out = response.getWriter();**: Creates a **PrintWriter** instance to write the output to the response.

d. **out.print(String.format("{\"status\": \"%s\"}", "Invalid credentials or wrong account type"));**: Writes a JSON object with a "status" field containing the error message "Invalid credentials or wrong account type" to the response.

e. **out.flush();**: Flushes the **PrintWriter**, ensuring that the output is sent to the client.