**Login**

1. **Description:**
   * 1. User who has an account will go to log in section
     2. He/she has to fill in username and password
     3. Submit the data to server
     4. If server response successful message -> go to main functions
     5. If server response failure message -> go back to the previous message
2. **Tasks:**
   1. **Client:  
      Input:** username + password  
      **Output:** ClientMessage -> JSON
      1. Create form for user to input username or password.
      2. Save input data as structure  
         {method = 3,  
         user = “username”  
         password = “password”}
      3. Wrap message to JSON
      4. Send message to server
      5. Receive message from server
      6. Extract and Read messages
      7. Go to corresponding states
   2. **Server:  
      Input:** ClientMessage as JSON  
      **Output:** ServerMessage as JSON
      1. Receive message from client
      2. Extract received data as structure
      3. Check type of method
      4. Check available user + password in database
         1. Fail:  
            - If username or password not in database  
            wrap message with {method = 1, error = [4], code = 5}
         2. Success:  
            Wrap message with {method = 0, code = 1}
      5. Wrap message to JSON
      6. Send response to user
3. **Test:**
   1. **Successful**username = “abcde”  
      password = “123456”  
      Message Response: code = 1
   2. **Wrong password :**  
      username = “abcde”  
      password = “123”  
      Message Response: { code = 5, error code = [4]}
   3. **Wrong username:**  
      username = “abcdefg”  
      password = “123456”  
      Message Response : { code = 5, error code = [4]