# 1-COMPONENTS

## A-Login form

Create a login form (Sign-In), including:

- 2 input fields named "Username" and "Password"
- 2 submit buttons named "Connect" and "Sign-Up" that allows players to submit the form or to access to the registration form.

#### **B-Registration form**

Create a registration form (Sign-Up), including:

- 3 input fields named "Username", "Password", and "Confirm Password"
- 2 submit buttons named "Create" and "Sign-In" that allows players to submit the form or to access to the login form.

#### C-Password modification form

Create a password modification form, including:

- 3 input fields named "Existing Username", "New Password", and "Confirm New Password"
- 2 submit buttons named "Modify" and "Sign-In" that allows players to submit the form or to access to the login form.

## **D-Guesser game form**

Create a game form (Kid Guesser Game), including:

- 5 select fields that allow each to select a number between 0 to 12 in order to guess in advance 5 different numbers the system will randomly generate when the form will be submitted.
- 2 submit buttons named "Submit" and "Sign-Out" that allows players to submit the form or to disconnect and access to the login form.

After the player submits this form, the following 3 messages will be displayed.

- 1-We generate the numbers a, b, c, d, e
  (where a, b, c, d, e are the numbers randomly generated)
- 2-You guessed the number f, g, h, i, j (where f, g, h, i, j are the numbers the player guessed and submitted)
- 3- One (the most appropriate one) of the 3 sentences below:
  - 1-Result: You guessed none of the numbers we generated! You're an APPRENTICE guesser! Try again!
  - 2-Result : You guessed x of the numbers we generated! You're a GOOD guesser!

Where x is lower than between 1 and 5

3-Result: You guessed all the numbers we generated!
You're an EXCELLENT guesser!

See the screenshot below as models and used the indications provided to create the most appropriate interface and text.



# 2-TECHNICAL SPECIFICATIONS

### **Login form**

- When the username and password written by the player within the login form are similar to a pair of username and password already registered in the database, display the guesser game form.
- 2. When the username written by the player within the login form is not similar to a username already registered in the database, display the message "You entered a wrong username!".
- 3. When the username written by the player within the login form is similar to a username already registered in the database but the password is not similar to the corresponding password already registered in the database, display the message "You entered a wrong password!".
- 4. When the player enters a wrong password display an additional hyperlink or button that allows the player to modify the password.

## **Registration form**

- When the username written by the player within the registration form is similar to a username already registered in the database, display the message: "This username already exists".
- 2. When the 2 passwords written by the player within the registration form are not the same, display the message: "You entered 2 different passwords.".

#### **Password modification form**

1. Based on the previous indications, decide how this form operates in a way it makes sense.

#### **Database**

1. Use the extension mysqli to connect the login and registration form to MySQL to store, check and modify (insert, select, and update) the usernames and passwords.

2. Database name: ACCOUNTS

3. Tables: USERS

4. Columns:

Name	Data type	Constraint	Other properties
ID	INT(5)	PRIMARY KEY	AUTO_INCREMENT
USERNAME	VARCHAR(50)	NOT NULL	
PASSWORD	VARCHAR (50)	NOT NULL	

```
CREATE TABLE users(
    userid INT PRIMARY KEY AUTO_INCREMENT,
    username VARCHAR(50) NOT NULL,
    password VARCHAR(50) NOT NULL
);
```

# Guesser game form

- 1. Use the super global variable POST to send the form data.
- 2. Use only 1 HTML select tag (<select><option></select>) and a PHP loop (for(\$i=0; \$i<5; ++\$i)) to create the 5 select input.
- 3. Use the built-in function rand() to generate the random numbers.

#### **General Instructions**

- 1. Build your code using and appropriate OOP structure, including class, property, method, and object.
- 2. Display the error messages within the forms to allow the player to be able to just modify the data entered and submit the form again when applicable.
- 3. Do not create isolated pages, without buttons or hyperlinks (as indicated) that allows the player to go to another page.
- 4. Use the built-in functions stripslashes(), strip\_tags(), and htmlentities() to sanitize each data received from the forms or the database.

- 5. You are free to add style (e.g. CSS and Bootstrap) to customize the visual aspect of your tbe pages and components (e.g. forms, text, images...).
- 6. Create a different file when requires (e.g. one file for each form and form handling).
- 7. Use lower case letters to write the code, when applicable (e.g. capital for constants).
- 8. Add indents to your code to make it easy to be reviewed.
- 9. Add significant comments to your code to make it easy to understand.
- 10. Test all the functionalities of your program to make sure they work correctly.