#### **UNIT TESTS:**

#### **Team Member: Kevin Wen**

Tested categorization.php, matchmake.php, and messages.php

Module 1: categorization.php

Tested with test personality trait arrays of length 4 with index from 0 to 3.

### **Equivalence Classes:**

Arrays with distinct values at each index:

Test Case = array(1,2,3,4);

Empty array:

Test Case = array();

Array with all zero entries:

Test Case = array(0,0,0,0);

Array with all identical entries:

Test Case = array(4,4,4,4);

Arrays with tied values:

Test Case = array(1,4,4,2);

Arrays with only one nonzero value:

Test Case = array(5,0,0,0);

### Module 2: matchmake.php

Tested with dummy user categories and biographical information Equivalence Classes:

2 Users not in the same personality category:

Test Case: User1{category = Charmander}, User2{category = Bulbasaur}

2 Users not in the same age range:

Test Case: User1{age = 18}, User2{age = 54}

2 Users with mismatched gender and gender preferences:

Test Case: User1{gender = male, gender preference = female},

User2{gender = male, gender preference = female}

2 Users who have the same category, age range, and matching gender/gender preferences:

Test Case: User1{category = charmander, age 30, gender = male, gender preference = female}, 2 User2{category = charmander, age = 32, gender = female, gender preference = male}

Module 3: messages.php

Tested with dummy usernames, user id, email, and photos

**Equivalence Classes:** 

Logged in User is the Chat Sender:

Test Case: Chat Sender Info = Current Session User info

Chat Recipient is another User in database:

Test Case: Chat Recipient = user2, user2 is in "users" MySQL database Chat Recipient is not in database:

Test Case: Chat Recipient = user300, user 300 is not in "users" MySQL database

Chat Recipient is considered a match for Logged in User

Test Case: Chat Recipient is initially shown on the match page, clicking Chat should open a new conversation with the Recipient

## **Team Member: Dennis Nguyen**

Tested edit profile.php

Module 1: edit\_profile.php

Image Upload: Tested with a set of files for image upload

**Equivalence Classes:** 

Users without an uploaded image are provided with a default user image.

Files can only be image files

Valid Set: filesExtension = {.jpeg, .jpg, .png, .gif}

Files are limited to a certain size range

Valid Set: Test case fileSize1 > 0, fileSize2 <= 50000

Username: Tested with a set of strings containing a combination of illegal and legal characters.

### **Equivalence Classes:**

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric

Invalid Set: Test Case = x such that x contains any special character

Email: Tested with a set of strings containing a combination of illegal and legal characters

## **Equivalence Classes:**

Empty Set: Test Case = {}

Valid Set: Test Case = x@y.z such that x is Alphanumeric, y is a valid domain, and z is a valid web extension(?) i.e ".com", ".org", ".gov" Invalid Set: Test Case = x@y.z such that x is not alphanumeric, y is an invalid domain, or z is an invalid web extension

Biography: Tested with strings of varying lengths and characters <u>Equivalence Classes:</u>

Text input will halt input if string exceeds length of 255 characters.

Empty Set: Test Case = {}

Valid Set: Test case = bioString.length>= 0, bioString.length <= 255

Password and Password Confirmation: Tested with a set of strings containing a combination of illegal and legal characters.

## **Equivalence Classes:**

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric, and Password ==

**Password Confirmation** 

Invalid Set; Test Case = x such that x is not Alphanumeric, or

Password != Password Confirmation

Gender and Gender Preference: Values locked to radio inputs with selections possessing defaulted values

## **Team Member: Anthony Chian**

Tested quiz take.php, quiz results.php

Module 1: quiz\_take.php

Quiz name: Tested with a set of strings of different lengths and

combination of characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric

Invalid Set: Test case = x such that x contains any special characters

Quiz Description: Tested with a set of strings of different lengths and

combination of characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric

Invalid Set: Test case = x such that x contains any special characters

Question: Tested with a set of strings of different lengths and

combination of characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric

Invalid Set: Test case = x such that x contains any special characters

Answers: Tested with a set of strings of different lengths and

combination of characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric and is not

equivalent to another answer for the same question

Invalid Set: Test case = x such that x contains any special characters or

is equivalent to another answer for the same question

Module 2: quiz\_results.php

Quiz Results: Tested with a set of strings of different lengths and

combination of characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric and is not

equivalent to another result for the same quiz

Invalid Set: Test case = x such that x contains any special characters or

is equivalent to another result for the same quiz

Quiz name: Tested with a set of strings of different lengths and

combination of characters

Equivalence Classes:

Empty Set: Test Case = {}

Valid Set: Test case = x such that x is Alphanumeric

Invalid Set: Test case = x such that x contains any special characters

### **Team Member: Richard Torres**

Tested sign\_up.php, login.php, create\_quiz.php

Module 1: sign\_up.php

Username: Tested with a set of strings containing a combination of

illegal and legal characters.

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric and length of  $x \ge 0$ 

min\_username\_length

Invalid Set: Test Case = x such that x contains any special character

Email: Tested with a set of strings containing a combination of illegal

and legal characters

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x@y.z such that x is Alphanumeric, y is a valid domain, and z is a valid web extension(?) i.e ".com", ".org", ".gov" Invalid Set: Test Case = x@y.z such that x is not alphanumeric, y is an invalid domain, or z is an invalid web extension

Password and Password Confirmation: Tested with a set of strings containing a combination of illegal and legal characters.

### **Equivalence Classes:**

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric, Password == Password Confirmation, and length of x >= min\_password\_length Invalid Set; Test Case = x such that x is not Alphanumeric, or Password != Password Confirmation

Gender and Gender Preference: Values locked to radio inputs with selections possessing defaulted values. It is not possible to have an invalid input for these fields.

Date of Birth: Tested with a set of valid and invalid numeric dates Equivalence Classes:

Empty Set: Test Case = {}

Valid Set: Test Case = mm-dd-yyyy such that 1<=mm<= 12, 1<=dd<=num\_days(mm), and current\_year - yyyy >= 18 Invalid Set: Test Case = mm-dd-yyyy such that !(1<=mm<=12), ! (1<=dd<=num\_days(mm)), or current\_year - yyyy < 18; Input type of the field restricts input of the date to valid dates by default. I.E. input  $13-32-2018 \rightarrow 12-31-2018$ 

# Module 2: login.php

Username/Email: Tested with a set of valid and invalid strings.

## **Equivalence Classes:**

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric or in a valid email format

Invalid Set: Test Case = x such that x is not Alphanumeric or is not in a valid email format

Password: Tested with a set of valid and invalid strings

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric

Invalid Set: Test Case = x such that x is not Alphanumeric

Module 3: create\_quiz.php

Quiz name: Tested with a set of valid and invalid strings

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric with ".,?!"

Invalid Set: Test Case = x such that x is not Alphanumeric with ".,?!"

Description: All input is valid

Question name: Tested with a set of valid and invalid strings

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric with ".?! " and

current question != any previous questions

Invalid Set: Test Case = x such that x is not Alphanumeric with ". ?! "

or current question == any previous questions

Answer name: Tested with a set of valid and invalid strings

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric with ".?! " and

current answer != any previous answer of the same question

Invalid Set: Test Case = x such that x is not Alphanumeric with ".?! " or current answer == any previous answer of the same question Answer Trait: Tested with any combination of predefined traits <a href="Equivalence Classes:">Equivalence Classes:</a>

Duplicate Trait assignments: within the same question Unique Trait assignments: within the same question

Results: Tested with a set of valid and invalid strings

**Equivalence Classes:** 

Empty Set: Test Case = {}

Valid Set: Test Case = x such that x is Alphanumeric and current result!

= any previous results

Invalid Set: Test Case = x such that x is not Alphanumeric or current

result == any previous results