1. UAT Scope (In Scope – Out of Scope)			
UAT - In Scope	UAT - Out of Scope		
Implemented features User stories Strategy plan feasible features	Future features		

# 2. UAT Assumptions and Constraints

# **UAT Assumptions**

All bugs found had been solved

This is the final version of the product before deployment

# **UAT Constraints**

Time frame: 2 days

#### Resources:

• Human resources: 1 tester

• Hardware: Acer Aspire, Samsung Galaxy Tablet, Android mobile

• Operating systems: Windows 10, android

• Browser tested: Firefox, Chrome, Edge

3. UAT Risks					
Description	Probability High Med Low	Impact High Med Low	Mitigation		
Inexperienced tester	High	High	Created a bug report form in the README.md file on the bug section, to help the tester to describe the issue properly		

4. UAT Team Roles & Responsibilities

4. OAT Team Roles & Responsibilities		
Name	Roles	Responsibilities
		Testing on:
Ignazio Sotgiu	Tester	Chrome
		<ul><li>Firefox</li></ul>
		Edge
		<ul> <li>Acer Aspire 5740</li> </ul>
		<ul> <li>Android mobile</li> </ul>
		<ul> <li>Samsung Galaxy</li> </ul>

5. UAT Entry Criteria				
ID	Criteria			
5.1	The development of the features to implement is complete			
5.2	All reported bugs are fixed			
5.3	No high or medium issues are reported			
5.4	Hardware and software for testing are available and working correctly			

6. U	6. UAT Requirements-Based Test Cases				
ID	Test Cases				
6.1	Dark / Light theme switch Mobile Device				
	As a user, I want to be able to play the game with a light or dark color theme As a user, I want to have a button to switch to a dark or light theme  Please visit <a href="https://ignaziosotgiu.github.io/trivia-quiz/">https://ignaziosotgiu.github.io/trivia-quiz/</a>				
	<ul> <li>Scroll on top of the page to see in the top right the theme switch displaying the sun</li> <li>Click on the icon displaying the sun</li> <li>See the white ball of the switch moving from left to right covering the sun and showing the moon and changing the switch color to a dark background. The colors of the web page change from a dark theme to a light theme: <ul> <li>Header/ navigation bar background changes to a white question Marks image</li> <li>The image in the background in the Welcome message section changes to an abstract white image</li> <li>The text color of the welcome message changes to black and a white overlay background will prevent confusion and allow clear reading</li> </ul> </li> </ul>				
	<ul> <li>The Start button get a black border</li> <li>The footer background color changes to black</li> </ul>				

- Scroll on the top of the page to find the theme mode on the right
- Click on the icon displaying the moon
- See the white ball of the switch moving right to left covering the moon and showing the sun and chancing the switch color to a light blue background. The colors of the web page change from light theme to dark theme:
  - Header/ navigation bar background changes to a dark question marks image
  - ➤ The image in the background in the Welcome message section changes to an abstract dark image
  - ➤ The text color of the welcome message changes to golden yellow (#eca54c)
  - ➤ Footer background color changes to brown color (#713200)

#### Expected result:

- The user can see the switch on the top of the page displaying the sun
- When the user clicks the switch the page will turn into light mode
- The user can see the switch on the top of the page displaying the moon
- When the user clicks the switch the page will turn into dark mode

# 6.2 Dark / Light theme switch Tablet and Desktop Devices

As a user, I want to be able to play the game in light or dark color As a user, I want to have a button to switch to a dark or light mode

- (On desktop screens) Find the theme switch on the navigation bar placed on the right side
- (On tablet screens) Find the theme switch on the top right of the page
- Click on the icon displaying the sun
- See the white ball of the switch moving from left to right covering the sun and showing the moon and changing switch color to a dark background The colors of the web page change from the dark theme to the light theme:
  - Header background changes to a white guestion marks image
  - The navigation bar changes to a lighter color (#ff933d)
  - > The navigation links change to black color
  - ➤ The image in the background in the Welcome message section changes to an abstract white image
  - The text color of the welcome message changes to black and a white overlay will prevent confusion with the background
  - > The Start button get a black border
  - > The footer background color will change to light brown color

(#ff933d) to match the navigation bar

- The footer icons and text change to black color
- Scroll to the top of the page to change back to the dark theme
- Click on the icon displaying the moon
- See the white ball of the switch moving right to left covering the moon and showing the sun and chancing the switch color to a light blue background. The colors of the web page change from light theme to dark theme:
  - Header background changes with a dark question marks image
  - ➤ The navigation bar changes to brown color (#713200)
  - > The navigation links change to white color
  - The image in the background in the Welcome message section changes to an abstract dark image
  - The text color of the welcome message changes to golden yellow (#eca54c)
  - ➤ The footer background color will change to brown color (#713200)
  - > The footer icons and text change to white

#### Expected result:

- (On tablet device) The user can see the theme switch on the top of the page
- (On desktop device) The user can see the theme switch on the right in the navigation bar.
- The sun is shown on the theme switch
- When the user clicks the sun the page turns into the light mode
- The user can see the switch displaying the moon
- When the user clicks the moon the page turns into dark mode

## 6.3 Navigation Menu Mobile Device

As a user, I can see at the top right of the page a collapsed navigation icon As a user, I can click the navigation icon and expand the navigation menu As a user, I can see the 3 navigation links
As a user, I can see the red reset button in the navigation bar

- Scroll up to the top of the page to see on the right the collapsed navigation icon
- Click on the icon
- The navigation menu expands on the right of the page below the collapsed navigation icon showing the user the 3 navigation links and a reset button:
  - Register for Newsletter
  - Contact Us

- > Instructions
- Reset
- Click on any link to open the linked modal
- Click in the modal, outside of the forms/instructions text to close the modal
- Click on the reset button
- A warning message appears
- Click cancel to close the message without resetting the score
- Click on the reset button
- A warning message appears
- Click Reset to reset the score data
- A success message confirms reset
- The message closes and the user is back on the homepage

# Expected Result:

- The user can see and recognize the navigation icon
- The menu expands and collapses by clicking the navigation icon
- The user can see the 3 links available in the menu
- The user can see the red reset button on the navigation bar
- The user can click the reset button and see a warning message
- The user has to confirm the reset before the action is executed

# 6.4 Navigation Menu Tablet and desktop Devices

As a user, I want to find the navigation bar below the header where I can find the website navigation links

- Scroll up to see below the header the navigation bar
- On the navigation bar will find 3 navigation links and the reset button:
  - Register for Newsletter
  - Contact Us
  - Instructions
  - > Reset
- Click on any link to open the linked modal
- Click in the modal, outside of the forms/instructions text to close the modal
- Click on the reset button
- A warning message appears
- Click cancel to close the message without resetting the score
- Click on the reset button
- A warning message appears
- Click Reset to reset the score data
- A success message confirms reset

• The message closes and the user is back on the homepage

#### Expected Result:

- The user can see the navigation bar
- The user can see the 3 links available in the menu
- The user can access the modals linked to the navigation bar links
- The user can see the reset button on the navigation bar
- The user has to confirm the reset before the action is executed.

## 6.5 Logo Mobile Tablet and Desktop Devices

As a user, I can see the logo on the top center of the page displaying the company name

Please visit https://ignaziosotgiu.github.io/trivia-guiz/

- Scroll up at the top of the page to see the round logo with "Trivia Quiz" displayed in the center
- Click the logo refreshes the page
- On Tablet and Desktop screens there is a slide effect added when the page is refreshed. Clicking the logo the background slides from the left and the company name slides from the right meeting in the center of the header forms the company logo

#### **Expected Result:**

- The user can see the logo on the top of the page
- When the logo is clicked refreshes the page
- On Tablet and Desktop screens when the logo is clicked the slide effect appears

#### 6.6 Welcome Message and Start Button Mobile Tablet and Desktop Devices

As a user, I can see the welcome message

As a user, I can see below the message the green call to action (CTA) "Start" button

As a user, I select "Start" to start the game

- The user can see at the center of the page the welcome message
- The message invites the user to play the game
- The user can see below the welcome message the (CTA) "Start" button

- Click the "Start" Button
- "Please select a Category" modal is displayed

## Expected Result:

- The user can see the welcome message at the center of the page
- The user can see below the welcome message the green "Start" button
- When the user clicks "Start" the Please select a Category screen appears

### 6.7 | Category Buttons Mobile Tablet and Desktop Devices

As a user; I want to see the Category Button choice on the screen As a user, I want to select each Category Button As a user, I want the selected button to turn green to confirm the selection

#### Please visit https://ignaziosotgiu.github.io/trivia-quiz/

- Click the "Start" button in the center of the homepage
- "Please select a Category" modal is displayed:
  - > 12 different buttons are displayed
  - > Each Button contain a Category name
  - > Each Button contain a purple icon
  - Every icon is different depending on the Category
- Click outside the icons section to close the modal and go back to the homepage without choosing the Category
- Click the "Start" button in the center of the homepage
- "Please select a Category" modal is displayed
- Follow test or each of the Category Buttons:
  - Click on the "Start" button
  - Select Category
  - > The selected button changes color to green
  - Please select Difficulty Level is displayed
  - Click any difficulty level
  - > Wait for the countdown to finish
  - > The first question is displayed
  - Click on the logo to go back to the homepage

- The user can see the Category choice after clicks "Start"
- The user can see 12 Category Buttons with icons and names
- The user can select any of the Category Buttons
- The selected Category Button change color to green
- The Difficulty Level choice appears after the Category Button has been selected

#### 6.8 Difficulty Level Buttons Mobile Tablet and Desktop Devices

As a user, I want to see the Difficulty Level choice on the screen As a user, I want to select each Difficulty Level button As a user, I want the buttons to have colors to help the selection As a user, I want the questions to start after the selection is made

Please visit <a href="https://ignaziosotgiu.github.io/trivia-quiz/">https://ignaziosotgiu.github.io/trivia-quiz/</a>

Repeat the following instruction for each difficulty button

- Click on the "Start" button at the center of the homepage
- "Please select a Category" modal is displayed
- Click on any Category Button
- The Select Difficulty Level modal is displayed in the center of the screen
- The user can see 3 buttons:
  - > Green button for easy level and 10 questions
  - Orange button for medium level and 13 questions
  - > Red button for hard level and 15 questions
- Each button contains a text and an icon
- Click on the easy/medium/hard level button
- Difficulty level modal closes
- A message appears in the center of the screen "Ready to start... Good Luck and Enjoy"
- A 3 to 0 countdown appears on the screen below the message
- After the countdown is finished the first question is displayed in place of the message and the countdown
- Answer all the questions:
  - > Easy level 10 questions
  - ➤ Medium level 13 questions
  - ➤ Hard level 15 questions
- The end of the game page appears after the last question is answered
- Click on the Trivia Quiz logo to refresh the page

- The user can see the Difficulty Level Buttons after the Category has been selected
- The Difficulty Level Buttons have different color and icons to help the user with the choice
- The user can select any of the difficulty level buttons
- After the selection, the difficulty level buttons are replaced by a new message and a 3 to 0 countdown sequence

• After the countdown sequence, the first question of the game is displayed

# 6.9 Question Display and Answer Buttons Mobile Tablet and Desktop Devices

As a user, I want to see the question in the middle of the screen

As a user, I want the answer buttons displayed below the question As a user, I want the true/false question to have true/false buttons

As a user, I want the multiple-choice question to have 4 answer buttons displayed

As a user, I want the button to change color after my selection:

- Green for a correct answer
- > Red for an incorrect answer

As a user I want to see a message after my answer:

- Success in case of a correct answer
- Error in case of an incorrect answer

As a user, I want for the multiple-choice incorrect answer the message to display which was the correct answer

As a user, I want to see the number of my correct and incorrect answers updated while I progress through the game

- Select the "Start" button
- Select any Category
- Select any Difficulty Level
- After the countdown, the question is displayed in the center of the screen
- For a True / False question the user sees 2 buttons below the question:
  - > Green button for True
  - > Red button for False
- Select true button:
  - > If the answer is correct
    - The true green button stays green
    - Success message is displayed
    - Add 1 to the count of the correct answers
    - Display the next question
  - ➢ If the answer is incorrect
    - The true green button change to red
    - Incorrect message is displayed
    - Add 1 to the incorrect answers count
    - Display the next question
- Select False button:
  - ➤ If the answer is correct
    - Red button change to green
    - Correct message is displayed
    - Add 1 to correct answers
    - Display the next question

- ➤ If the answer is incorrect
  - Red button stay red
  - Incorrect message is displayed
  - Add 1 to incorrect answers
  - Display the next question
- For a multiple-choice question, the user sees 4 light blue buttons below the question
- Select one of the buttons:
  - If the answer is correct
    - The button change to green
    - Success message is displayed
    - Add 1 to the count of the correct answers
    - Display the next question
  - > If the answer is incorrect
    - The button change to red
    - Incorrect message is displayed
    - Incorrect message text displays the correct answer
    - Add 1 to the incorrect answers count
    - Display the next question

### Expected result:

- The user sees the question in the middle of the screen
- The user sees the answer button displayed below the question
- The user sees True/False answer buttons for True/False questions
- The user sees 4 answer buttons for multiple-choice questions
- After the selection the button change color to green if the answer is correct or red if the answer is incorrect
- After the answer button is selected a correct message is displayed on the screen if the answer is correct
- An incorrect message is displayed if the answer is incorrect
- For multiple-choice incorrect answer, the incorrect message displays the correct answer
- At the bottom of the page, the count of correct and incorrect answers is updated correctly after every answer

# 6.9 End of the Game page - Sharing result links – Reset and Continue Buttons Mobile Tablet and Desktop Devices

As a user, at the end of the game, I want to know the number of correct answers and incorrect answers

As a user, I want to know what is the percentage of correct answers

As a user, I want to see a comment about my performance

As a user, I want to know if I played more games the total amount of questions I answered, how many I have answered correctly, and how many incorrectly As a user, I want to know my overall percentage of correct answers

As a user, I want to be able to share my result on Twitter

As a user, I want to be able to share my result on Facebook

As a user, I want to continue the game without resetting my score

As a user, I want the Continue Button to be green

As a user, I want the Reset Button to be red for warning

As a user, I want to be able to reset the counters and start a new game

- Click the "Start" button
- Select a category
- Select a difficulty level
- Wait for the countdown to reach 0 and display the question
- Answer the questions
- After answering the last question the end of the game page is displayed
- The end of the game message is displayed at the center of the screen
- The message contains:
  - Comment about the performance
  - > Total correct answers for the last session
  - > Total incorrect answers for the last session
  - Percentage of the correct answer for the last session
  - The overall number of questions answered
  - The overall number of correct answers
  - The overall number of incorrect answers.
  - The overall percentage of correct answers
- Below the end of the game message, there is the share button
- The share button is a dropdown menu
- Select the share button
- The dropdown menu shows 2 links to social media platforms:
  - > Facebook
  - > Twitter
- Select Facebook
- Facebook sharing page opens in a new tab
- Select Twitter
- Twitter sharing page opens in a new tab
- Below the share button there are 2 more buttons:
  - > The green Button Continue
  - > The red Button Reset
- If click on Continue
- A new message is displayed showing the number of the session the user is about to begin
- Below the message, the green "Start" button is displayed
- If click on Reset a warning message appears
- Click cancel to stop the reset action
- Confirming on reset the score will be deleted and the user is back on the

#### homepage

## **Expected Result:**

- At the end of the game, a message is displayed. It contains:
  - > A comment about the user performance
  - The number of correct answers
  - > The number of incorrect answers
  - The percentage of correct answers
  - > The overall number of questions answered
  - > The overall number of correct answers
  - > The overall number of incorrect answers
  - The overall percentage of correct answers
- Below the message, there is the Share button
- When clicked opens a dropdown menu with links to share the result on Facebook and Twitter
- Facebook link opens a new tab
- Twitter link opens a new tab
- Below the Share button there are 2 buttons:
  - Green button Continue to continue the game
  - Red button Reset to reset the counters and go back to the homepage
- Click on continue the new message is displayed containing the number of the session the user is about to begin
- Below the message, the green "Start" button is displayed
- Click to select the category

# 6.10 | Registration for Newsletter Mobile Tablet and Desktop Devices

As a user, I want to register for the newsletter As a user, I want to receive an email to confirm my registration

- Find the link Register for Newsletter in the navigation bar on desktop and tablet
- Find the link Register for Newsletter in the dropdown menu after clicking the toggle icon on the top right of the screen on a mobile device
- Click Register for Newsletter link
- The screen displays a modal with a registration form
- Click on the X icon on the top right of the form
- The registration modal closes
- Find the link Register for Newsletter in the navigation bar on desktop and tablet
- Find the link Register for Newsletter in the dropdown menu after clicking the toggle icon on the top right of the screen on a mobile device

- Click Register for Newsletter link
- The screen displays a modal with a registration form
- On desktop and tablet screen a subscribe image is displayed on the left part of the screen
- Fill the form name field
- Click Submit
- An error message asks the user to enter a valid email address
- Click on the screen to close the message
- Enter an invalid email address in the form
- Click Submit
- An error message asks the user to enter a valid email address
- Click on the screen to close the message
- Enter a valid email address in the form
- Click Submit
- An error message asks the user to tick the newsletter box before submitting
- Click on the page to close the message
- Fill the form fields:
  - Name
  - Email Address
  - Tick the box to agree to receive the newsletter
- Select the Submit button
- A confirmation message will display that the email has been sent
- Check the user email inbox to see the email to confirm the subscription was successful
- An error message will display if the email was not sent

#### **Expected Result:**

- Register for Newsletter link is present in the navigation bar and the mobile dropdown menu
- The desktop and tablet form contains a subscribe image on the left side of the form
- The user can register for the newsletter
- The user has to fill all the fields in the form
- The user has to tick the box to agree to receive the newsletter
- The user has to fill the form with a valid email address to successfully submit
- The user receives an email to confirm the registration

#### 6.11 | Contact Us Mobile Tablet and Desktop Devices

As a user, I want to be able to give feedback As a user, I want to be able to contact the company

- Find the link Contact Us in the navigation bar on desktop and tablet
- Find the link Contact Us in the dropdown menu after clicking the toggle icon on the top right of the screen on a mobile device
- Click Contact Us link
- The screen displays a modal with a contact form
- Click on the X icon on the top right of the form
- The contact modal closes
- Find the link Contact Us on the navigation bar on desktop and tablet
- Find the link Contact Us in the dropdown menu after clicking the toggle icon on the top right of the screen on a mobile device
- Click Contact Us link
- The screen displays a modal with a contact form
- On desktop and tablet screen a mail image is displayed on the left part of the form
- Fill the form name field
- Click Submit
- An error message asks the user to enter a valid email address
- Click on the screen to close the message
- Enter an invalid email address in the form
- Click Submit
- An error message asks the user to enter a valid email address
- Click on the screen to close the message
- Enter a valid email address in the form
- Click Submit
- An error message asks the user to write a message before submitting
- Click on the page to close the message
- Fill the form fields:
  - Name
  - Email Address
  - Write a message
- Select the Submit button
- A confirmation message will display that the email has been sent
- An error message will display if the email was not sent

- Contact Us link is present in the navigation bar and the mobile dropdown menu
- The desktop and tablet form contains a mail image on the left side of the form
- The user can contact the company
- The user has to fill all the fields in the form
- The user has to fill the form with a valid email address to successfully submit

#### 6.12 | Instruction Mobile Tablet and Desktop Devices

As a user, I want to check the game instructions As a user, I want to know how to play the game

Please visit https://ignaziosotgiu.github.io/trivia-quiz/

- Find the instructions link in the navigation bar on the tablet and desktop
- Find the instructions link in the dropdown menu clicking the toggle icon on the top right of the page on mobile devices
- Click the Instructions link
- A modal appears at the center of the page
- Click on the X icon on the top right of the page
- The instructions modal closes
- Find the instructions link in the navigation bar on the tablet and desktop
- Find the instructions link in the dropdown menu clicking the toggle icon on the top right of the page on mobile devices
- Click the Instructions link
- A modal appears at the center of the page
- The modal contains the instructions of the game
- At the bottom of the instructions; there is an OK button
- Click on the button to close the modal
- Click on the instructions link
- The instructions modal appear
- Click on the outside of the message window to close the modal
- The modal closes

#### Expected Result:

- The user can check the game instructions by clicking on the link Instructions on the navigation bar on tablet or desktop devices
- The user can check the game instructions by clicking on the link Instructions on the dropdown menu after clicking the toggle menu icon on the top right of the screen on mobile devices
- The user can read the instructions and get information about the game
- The user can click the "OK" button to exit the instructions and close the modal

# 6.13 | Footer Mobile Tablet and Desktop Devices

As a user, I want to go to trivia game social media platforms As a user, I expect to find links to social media platforms at the bottom of the page

- Scroll down at the bottom of the page
- In the footer; there are 3 icons
  - Facebook
  - > Twitter
  - > Instagram
- Click on the Facebook icon
- A new tab opens Facebook website
- Click on the Twitter icon
- A new tab opens Twitter website
- Click on the Instagram icon
- A new tab opens Instagram website

- The user will find the links to social media platforms in the footer at the bottom of the page
- Each link opens the social media website in a new tab

7. UAT Test Results				
ID	Test Cases	Pass/Fail	Tested By	Date Tested
6.1	Dark / Light theme switch - Mobile Device	Pass	Ignazio Sotgiu	04/04/2021
6.2	Dark / Light theme switch – Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.3	Navigation Menu Mobile Device	Pass	Ignazio Sotgiu	04/04/2021
6.4	Navigation Menu Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.5	Logo Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.6	Welcome Message and Start Button Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.7	Category buttons Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.8	Difficulty Level buttons Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.9	Question Display and Answer Buttons Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021

6.10	Registration for Newsletter Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.11	Contact Us Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.12	Instruction Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021
6.13	Footer Mobile Tablet and Desktop Devices	Pass	Ignazio Sotgiu	04/04/2021

8. Document Signatures				
Role	Name	Signature	Date	
Service Owner	Ignazio Sotgiu		04/04/2021	
Project Manager	Ignazio Sotgiu		04/04/2021	