Usability Testing:
roll4initiative

Participants

Target population: RPG players with no experience in online sessions (they would probably experience more issues in approaching the application).

Age: 15-35 years (we expect that people in this age range are confident enough with smartphone application UIs).

Knowledge in rpg environment and terminology: basic

Usage of smartphone: experience in voice-call app (discord, zoom, etc...).

Basic knowledge of english.

Equipment

Smartphone with:
- At least Android version 7 / iOS version 10
- Internet access
- At least Chrome version 84 / Safari version 13/ Firefox version 78 (required for the socket.io library https://socket.io/docs/v4/client-installation/)
- Microphone access

Stopwatch (smartphone timer)
Microphone/camera
Pens

Requirements

An external placeholder person who will embody a different role (narrator/generic roles) from the tester one.

Artifacts

Consent form
Background/pre-test questionnaire
Post-task questionnaires (SEQ)
Post-test questionnaire (SUS)

Tasks

#	Text of the task	Success criteria	Methodology
T1	Create and set up a new game for	The participant clicks the	-

		an RPG that requires the use of dice.	"CREATE GAME" button, inserts a game title, then enables the dice switch, clicks the "NEXT" button. [non critical error: click on disabled button / critical error: task not completed within 1min]	
T2	Create and set up a new game for an RPG that requires secret roles.		The participant clicks the "CREATE GAME" button, inserts a game title, then enables the secret roles switch. [non critical error: click on disabled buttons / critical error: create a game without secret role]	Think-aloud
T3	Complete the setup of the game by inserting some secret roles (pre-defined and not).		The participant inserts at least one custom and one pre-defined role then clicks on the "NEXT" button. [non critical error: click on back button to fix mistakes / critical error: user does not insert any custom role]	Cooperative Evaluation
T4	Upload an asset (any manual in pdf format) and complete the creation of the game.		The participant invites the required number of friends then clicks the "UPLOAD" button, selects a pdf to upload, finally clicks the "CREATE" button. [non critical error: the participant forgot to upload an asset but created the game and uploaded the asset during it. / critical error: the participant clicks the "CREATE" button without uploading any assets and then stops.]	Think-aloud
T5	Join the game that has just been created.		The participant finds the game they have just created in the homepage, clicks on it then clicks on the "JOIN GAME" button.	-

		[non critical error: the participant performs any other action before the specified ones / critical error: task not completed within 10 sec]	
T6	Mute themselves then the external placeholder person.	The participant taps their mute button and the one of the placeholder person. [non critical error: the participant performs the actions in a different order / critical error: task not completed within 35 sec]	-
T7	Activate the narration mode then disable it.	The participant taps and holds their icon, clicks on the "NARRATION MODE" button, then finds one of the possible ways to disable it. [non critical error: the participant performs other actions before the intended ones. / critical error: task not completed within 20 sec]	-
T8	Open any game asset and read its content.	The participant taps on the assets icon and opens a file. [non critical error: the participant performs other actions before the intended ones. / critical error: the participant doesn't find the asset area or exits the game]	Cooperative Evaluation
T9	Open the dice drawer and roll a D20 dice.	The participant swipes up the dice drawer and clicks on the requested dice. [non critical error: the participant roll another dice before the correct one / critical error: task not completed within 15 sec]	-
T10	Exit from the current game.	The participant finds a way out of the game. [non critical error: action	-

		performed in more than 10 sec / critical error: the participant can't find a way to exit]	

Metrics

Time on task
Debriefing after T4 and T10

Pre-test Questionnaire: Roll4Initiative, Pre-test Questionnaire (google.com)

Post-task SEQ Questionnaire (after T1 and T7):
- After T1: Roll4Initiative - T1 SEQ (google.com)
- After T7: Roll4Initiative - T7 SEQ (google.com)

Post-test SUS Questionnaire: Roll4Initiative - SUS Questionnaire (google.com)

Script

Hi, <name of the participant>. I am Lorenzo and today you will help us to find out usability problems about our roll4Initiative hi-fi prototype.
Remember that we are here to test the website, not you!
If you make mistakes, it's the interface's fault, not yours.

Please, fill out this document for giving us permission to
- Video record you
- Interview you briefly and take notes about what happens
- Use summary data for educational/research purposes
before starting the session.

Roll4Initiative - Consent form for usability testing (google.com)

Fill this pre-test questionnaire (just two questions) to make us know more about your background.

Roll4Initiative, Pre-test Questionnaire (google.com)

Now, have a look and explore the website for 3 minutes. We are now starting the video-record. Remember that you can take a break or withdraw from this study at any time.
[START the recording!]

…3 mins…

What do you think this app is needed for?

…[answer]...

Okay, now I will ask you to perform some tasks within the application to test it. We can't tell you how to achieve them.

T1 *Create and set up a new game for an RPG that requires the use of dice.*

TIME START
…[test]..
TIME END

Average time: 54,6 s
4/5 success, 1 critical error
80% success, 20% critical error, 0% non-critical error

First Post-Task Questionnaire: [Roll4Initiative - T1 SEQ (google.com)](google.com)

T2 *Create and set up a new game for an RPG that requires secret roles.*
Think aloud We ask you to say aloud your mental process - what are you going to do and why.

…[test]..

4/5, 1/5 non-critical error
80% success, 20% non-critical error

T3 *Complete the setup of the game by inserting some secret roles (pre-defined and not).*
Cooperative Evaluation During this task I'm available for any questions and we can ask each other for feedback.

…[test]..

3/5 success, 1/5 non-critical error, 1/5 critical error
60% success, 20% non-critical error, 20% critical error

T4 *Upload an asset (any manual in pdf format) and complete the creation of the game.*
Think aloud We ask you to say aloud your mental process - what are you going to do and why.

…[test]..

5/5 success
100% success

DEBRIEFING (If needed, ask specific questions about particular choices)

T5 *Join the game that has just been created.*

Think aloud We ask you to say aloud your mental process - what are you going to do and why.

TIME START
…[test]..
TIME END

5/5 success
100% success

ASK THE PLACEHOLDER PERSON TO JOIN THE SAME GAME.

T6 *Mute themselves then the external placeholder person.*
TIME START
…[test]..
TIME END

Average time 28s
2/5 success, 3/5 critical error
40% success, 60% critical error

T7 *Activate the narration mode then disable it.*

TIME START
…[test]..
TIME END

Average time 8s
5/5 success
100% success

Second Post-Task Questionnaire: [Roll4Initiative - T7 SEQ (google.com)](google.com)

T8 *Open any game asset and read its content.*
Cooperative Evaluation During this task I'm available for any questions and we can ask each other for feedback.

…[test]..

4/5 success, 1/5 critical error
80% success, 20% critical error

T9 *Open the dice drawer and roll a D20 dice.*

TIME START
…[test]..
TIME END

Average time 7.2s
5/5 success
100% success

T10 *Exit from the current game.*
TIME START
…[test]..
TIME END

Average time 15s
5/5 success
100% success

DEBRIEFING (If needed, ask specific questions about particular choices)

SUS Questionnaire: *[Roll4Initiative - SUS Questionnaire (google.com)](google.com)*
*Score = [Xodd-1 + (5-Xeven)] * 2.5*