

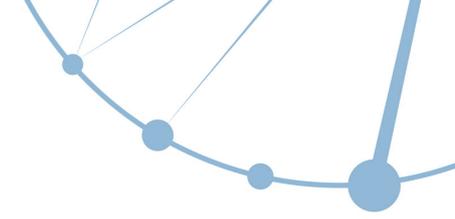


International  
professional  
development platform

# MODULE E

## BRICS Future Skills & Tech Challenge 2024

### «Mobile applications development»



## Find a couple

Layouts available by the link: <https://www.figma.com/design/obZid8Dypvq6xYt8tqSWBy/QuiziPeasy---E?node-id=0-1&t=rCWsa23cJpZ5nLu5-1>

It is necessary to download random images from supabase (fc\_images) in quantity based on the selected grid. The images must be arranged in a 3x3 grid on which each image has a pair (in some cases with the exception of one). All images should be "flipped", and the user should see only white squares. All cards must be shuffled randomly.

The main mechanics of the game:

- After successful loading and placement of images, it is necessary to start the timer, which should count until the current level is fully solved
- When clicking on the white square, it is necessary to display the image with an animation of flipping
- If only one image is open, then after clicking on the second white square, open the next image without closing the previous one
- If the user has opened two images and they are different, then they need to be turned back automatically
- If the user has opened two images and they are the same, then leave them open and give the player points according to the following formula: (100 is the number of seconds since the start).
- If the user has opened all the images except for one without a pair, then complete the level
- If the user chooses a different grid option, then it is necessary to start the level again with the appropriate number of images.

For the convenience of testing, implement the functionality to display all images and move them. When clicking on the lock button, it is necessary to display all the images and allow the user to move the cards in places using drag & drop. The moved cards must retain their ordinal position even after changing the grid. When you press the lock again, you need to turn over all the cards.

## Testing

Implement a UI test that will check the card flip mechanism. It is necessary to go through all the cards and check whether they are turned over or not.

Implement a Unit test to verify that the calculation of points for the game is correct.

## Keynote

Create a presentation describing the functionality of your application. If some functionality from the tasks has not been implemented, then you can take images from the layouts. The presentation should familiarize the reader with the games and features of the application.

Upload the source file and .pdf of the presentation to Git.

The presentation must be prepared in English. You will not have to make a speech. Just make slides.