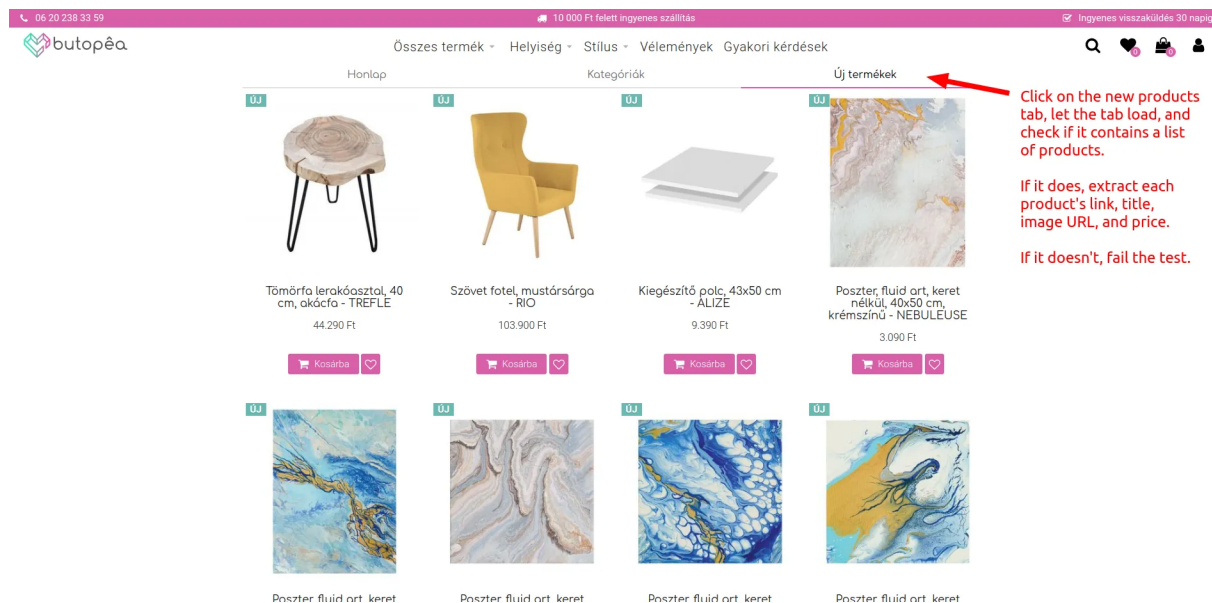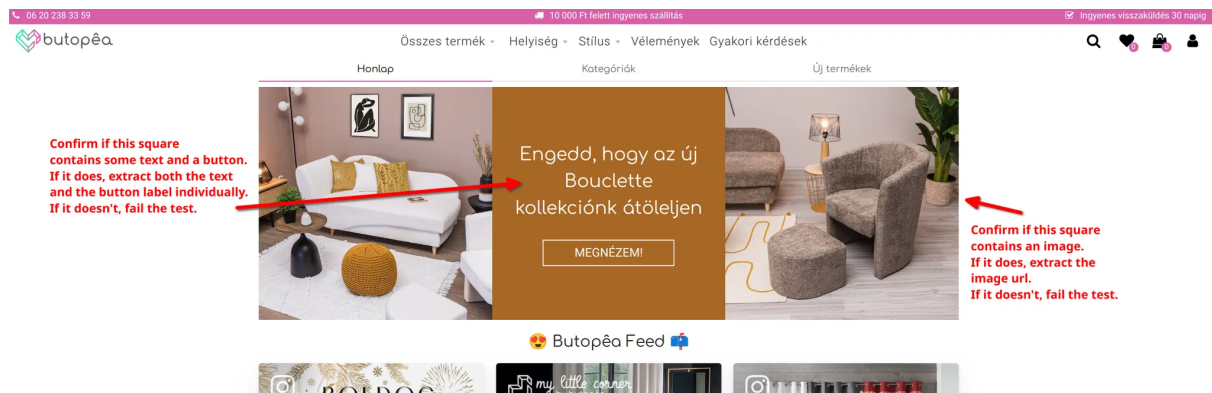**Bui Nguyen Kim Hai**
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System Integration Backend Preliminary Test Case:
End-To-End Testing on Website

1 Task

In this task, your objective is to create a few tests for a popular end-to-end testing framework known as Cypress. It is a JavaScript-based tool, primarily used for conducting automated functional tests. It provides an intuitive programming interface for controlling browsers such as Chrome to simulate actions taken by users and evaluate the outcome. This allows creating automated pipelines to test web applications after each modification and ensure nothing has been broken due to the introduced changes. Your tests will run on our website, 'https://butopea.com'. As described in the screenshots below, your tests should load the website, perform some actions, check for existence of certain elements, and extract data from the page. This also showcases the ability of Cypress to be used as a scraping tool for automating business processes. The extracted data should be logged.

Your submission must include:

- A documentation file, including instructions for running the code, as well as your supporting explanations

- The source code

- Screenshots showing results of the test, as well as the extracted information

You can either use a version control system (recommended, e.g. GitHub) or upload your submission in a ZIP file to Google Drive (please check that the link has been shared and is accessible in incognito).

2   Plans

I have no idea about Cypress when I first read the assignment. Start with the docs, and with the help of ChatGPT to understand the workflow of Cypress. That is chaining (like Promises), so I need to know what should be chained. And we can simple use CSS selector to query the specific element, so it is kind of straight forward to me to work with – I need to know Butopea HTML structure.

The firs task: Extract the text in the main banner, and the button's label in the main banner. Butopea main page has 3 banner – left, mid, and right. On the first task, both sub tasks work in the mid banner.

Subtask 1:

1. Visit the page

2. CSS Selector: '#home div.banner-square-column:nth-child(2) div.banner-square-overlay-heading p'

3. Retrieve the text using **invoke**

4. Check the text using **match**

5. Log and save

Subtask 2:

1. Visit the page

2. CSS Selector: '#home div.banner-square-column:nth-child(2) div.banner-square-overlay-cta button'

3. Retrieve the label using **invoke**

4. Check the label using **match**

5. Log and save

The second task: Check if the right banner has an image, extract the url if it did.

1. Visit the page

2. CSS Selector: '#home div.banner-square-column:last() img'

3. Retrieve the url using **invoke**

4. Add the prefix link of butopea

5. Log and save

The third task: Extract the products info.

1. Visit the page

2. CSS Selector: '#home-tabs-wrapper div.tab:has(button):last() button'

3. Click the button and wait 3 secs

4. CSS Selector: 'div.product-listing > div' to get product elements

5. CSS Selector: 'div.product a' to take the information element for each product element

6. Take the product link using **invoke**

7. CSS Selector: 'img.product-image_thumb' to get the image element

8. Take the url using **invoke** (add prefix too)

9. CSS Selector: 'div.product-tile-info p' to get the product title

10. Take the text using **invoke**, **trim** to avoid spaces

11. CSS Selector: 'div.product-tile-info div' to get the product price (in text)

12. Take the text using **invoke**, **trim** to avoid spaces

13. Add the product to the list

   Finally, log and save the list of products.

3   How to run

1. Pull my github repo: git clone https://github.com/whynotkimhari/butopea.part.2.git

2. Open the project, ensure you are in the project folder: %YOUR_PATH%/butopea.part.2/

3. Make sure you have npm available on your local machine. Then run this command: npm install cypress –save-dev && npm run cy:open

4. The program will start in some seconds. Then choose E2E Testing (Configured) example Figure 1

5. Then choose your browser. (I suggest Edge if you have) Then click Start.

6. After that, click into the **spec.cy.js** file (the only file on the screen)

7. It will take some seconds to load and run the tests.

8. You will see the result as Figure 2 when the tests run successfully.

9. For the screenshot and result of each test case, please go to the github: https://github.com/whynotkimhari/butopea.part.2
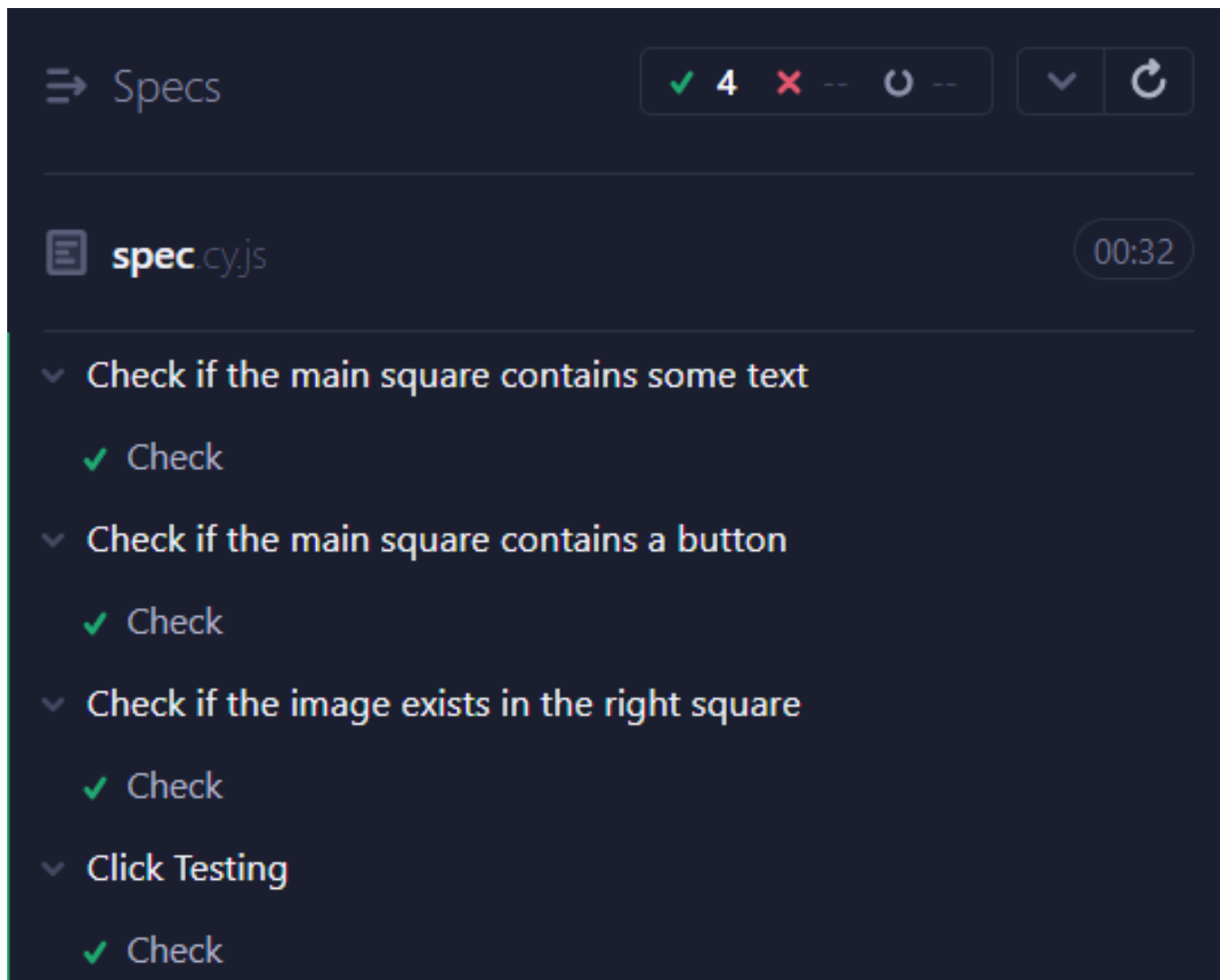
Figure 1: Cypress

Figure 2: Successful tests

—————————————the end—————————————