Test Report

Project Name: Instagram
Document Date: 18.11.2020
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App description

Instagram is an online photo-sharing, video-sharing, and social networking service .
Instagram is one of the most used social networks in communicating companies with consumers.
According to published data, there are 25 million business accounts on Instagram, and over 80%
of Instagram users in the world follow a business account.

Why this application?

I found it interesting to test Instagram because it is a very used application nowadays, it is an
application that I use daily.

What was tested?

It was tested a number of functionalities such as login, search, create account, edit account,
interactions such as like, comment, follow, create a post.

2.Test Environment

GitHub- https://github.com/AnamariaGirbaci/Proiect-final-Instagram.git
GitHub is a code hosting platform for version control and collaboration. It lets you and
others work together on projects from anywhere.

Cypress – cypress.io
Cypress is a JavaScript test automation solution for web applications. It enables teams
to create web test automation scripts. This solution aims to enable frontend developers and test
automation engineers to write web tests in the de-facto web language that is JavaScript.

Postman – www.postman.com
Postman is a popular API client that makes it easy for developers to create, share, test
and document APIs. This is done by allowing users to create and save simple and complex
HTTP/s requests, as well as read their responses. The result - more efficient and less tedious
work.

Test link – https://testlink.scoalainformala.ro/
TestLink is a web-based test management system that facilitates software quality
assurance. It is developed and maintained by Teamtest. The platform offers support for test
cases, test suites, test plans, test projects and user management, as well as various reports and
statistics

Chrome DevTool –
Chrome DevTools is a set of web developer tools built directly into the Google
Chrome browser.This tool helps you inspecting currently-loaded HTML, CSS and JavaScript to
showing which assets the page has requested and how long they took to load.

Lighthouse-
Lighthouse is an open-source Google tool that analyzes the performance of web pages.
While its focus is web applications and mobile sites, it still provides a lot of useful information
and recommendations that can make any website better.

For UI tests was used Cypress framework using JavaScript code.
For API test and performance was used Postaman tool.

- All tests were run in production

Test Environment	Software Detalies	Comments
Production	OS: Windows 10 Version 10.0.19041.508, IOS:14.2	
	Mobile Browsers: Safari, Internet Explorer	
	Browsers: Chrome,Microsoft Edge, Internet Explorer	
	Devices: Laptop, Mobile	DevTool – app for Chrome

Equivalence partition and boundary values applied for specified functionalities:

Functionality	Boundary	Equivalence partitioning	Comment
Search Bar	0,1,314,315	C1:0-not valid	Can't search without any character
		C2:1-314 - valid	Number between 1-314- allowed
		C3: 315 -valid	More than 315 char- not allowed

3.1Manual tests:

Test Case Id	Description	Comments
TM-QA08-306	It was tested if the user is able to create an account.	
TM-QA08-275	It was tested if the user is able to login with valid data.	
TM-QA08-339	It waws tested if the user is able to login with no input data.	
TM-QA08-310	Test that the user can upload a photo.	
TM-QA08-311	Test that the user can upload a video.	

TM-QA08-607	It was tested if the search bar will return something if is empty.	
TM-QA08-299	It was tested if the user is able to send a message.	
TM-QA08-312	It was tested if the user can change his password.	
TM-QA08-313	It was tested if the user can recover his forgotten password.	
TM-QA08-610	It was tested that the password typed is hidden.	
TM-QA08-476		
TM-QA08-610	It was tested that the password is hidden	

TM-QA08-319	It was tested if the app is functional on Windows 7.	
TM-QA08-318	It was tested if the app is functional on Windows 10.	
TM-QA08-334	It was tested if the app is functional on all browsers on PC.	Google Chrome Microsoft Edge Internet Explorer
TM-QA08-401	It was tested if the app is functional on all browsers on mobile.	-iphone 7 plus -Safari -Google Chrome
TM-QA08-275	It was tested if the user is able to login with valid data.	
TM-QA08-276	It wat tested if the user is able to login with invalid username and valid password.	
TM-QA08-283	It was tested if the user is able to login with both invalid username and password	
TM-QA08-281	It was tested that the user is able to login with valid username and invalid password.	
TM-QA08-292	It was tested if the user can follow another user.	
TM-QA08-290	It was tested if the user is able to search valid data.	

TM-QA08-293	It was tested if the user can like a photo.	
TM-QA08-294	It was tested if the user can leave a comment on a photo.	
TM-QA08-295	It was tested if the user can save a post.	
TM-QA08-296	It was tested if the user can redirect a post.	
TM-QA08-308	It was tested if the user is able to add a bio.	
TM-QA08-307	It was tested if the user is able to change the privacy of his profile.	
TM-QA08-547	It was tested if the search bar will return something when the user is typing just one character.	
TM-QA08-608	It was tested if the user is able to unsave a post.	
TM-QA08-609	It was tested if the user is able to play a video.	
TM-QA08-297	It was tested if the user is able to view a Instagram story.	
TM-QA08-614	It was tested if the user is able to logout.	
TM-QA08-613	It was tested if the user is able to complete the login-logout cycle.	

3.2 Automated tests:

Cypress is a JavaScript test automation solution for web applications. It enables teams to create web test automation scripts. This solution aims to enable frontend developers and test automation engineers to write web tests in the de-facto web language that is JavaScript

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3.3 API Tests

 - Application Programming Interface Testing- is a type of software **testing** that aims to determine whether the APIs that are developed meet expectations when it comes to functionality, performance, reliability and security for an application. **API testing** is used to determine the return value (response).

Were made request and it was checked the responses of the web application on various functionalities

Test Case ID	Functionality
Postman01	Log in

Postman02	View story
Postman03	View photo
Postman04	View video
Postman05	Like photo
Postman06	Save post

3.4 Smoke Tests

 - are a subset of **test** cases that cover the most important functionality of a component or system, used to aid assessment of whether main functions of the software appear to work correctly.

E2E Tests:

Test Case ID	Description	
TM-QA08-613	It was tested if the user is able to complete the login-logout cycle.	

Test Results

Functional testing:

Functionality	Total	Passed	Failed	Blocked	Not run	Defects
Login	5	5				
Create Post	2	2				
Account	3					
Search	4	4				
Interactions	9	9				
E2E	1	1				
Logout	1	1				

Non-functional testing:

Functionality	Total	Passed	Failed	Blocked	Not run	Defects
Performance	2	1	1			
Security	1	1				
Compatibility	6	5	1			1

Automated tests using Cypress:

API Tests using Postman:

Bugs and Improvements

Bugs

Defect ID	Platform	Summary	Description	Steps to Reproduce	Expected result	Actual result	Severity
11	Internet Explorer	Edit profile	It was tested that the user is able to edit his profile information.	1.Go on www.instagram.com 2.Log in 3.Go to my profile. 4.Click on Edit Profile section.	The edit profile section is updated.	The Edit Profile section is not working	Major
12	Google Chrome	Search	It was tested whether the search bar will return something if the user types a username containing just special characters.	1.Go on www.instagram.com 2.Log in 3.Type in the search box "@#$%^^&*("	The search bar should not be valid.	The search bar suggest the profile according to the description, not according the the username that was typed.	Major

Improvements

ID	Summary	Description	Severity
001	App on mobile	The mobile app has much more functionalities than the web app. The web app should have the upload photo and upload video functions.	Major

Conclusions

After testing the application without requirements, I realized that it is very difficult.

- 33 test cases were executed - 2 failed
- 18 automated tests were executed- all passed
- 2 bugs were found by performing Exploratory testing, 1 improvement
- Several functionalities have been tested using Functional Testing, Non-functional testing, UI, API, Security
- Compatibility testing was performed using Google Chrome, Internet Explorer and Microsoft Edge on web application and Safari, Internet Explorer, Google Chrome on mobile application.