Testing, testing, 1, 2, 3...



Who is Loana Ioana Chiorean?

I am a PM (former QA TL) & CL

Mozillian for more than 9 years now

I volunteer - Mozilla & EU Code Week.

I worked on devices for more than 10y.





Twitter @ioana_cis # lifeofamozillian

1,2,3 la perete stop..

- → Testing
 - ♦ What is is
 - Responsibilities
 - Manual vs Automation
 - **♦** Skills
 - ♠ A day in #lifeofatester
- → UX Testing
- → UX @ Mozilla

I didn't choose the thug life, the thug life chose me



2 - 10 .. 2 - 10 ..

- → Software testing is an investigation conducted to provide stakeholders with information about the quality of the software product or service under test.
- → Is really about reducing risk and so much more
 - Advocate of user UX
 - ◆ Software Engineer coding
 - Explorer
 - Scientist heuristics
 - Writer / Documentarist
 - ◆ Jack of all trades, master of ALL!*

^{*} not a bug, it is a feature

With great power comes...

What are your responsibilities?

- → Analyzing users stories and/use cases/requirements for validity and feasibility
- → Collaborate closely with other team members and departments
- → Execute all levels of testing (System, Integration, and Regression)
- → Design and develop automation scripts when needed
- → Detect and track software defects and inconsistencias
- → Provide timely solutions
- → Apply quality engineering principals throughout the Agile product lifecycle
- → Provide support and documentation



~ =

SDLC STLC

Requirements Gathering Test team reviews the requirements

Design Test planning, analysis and design is done => <u>Test Plan</u>

Development Finalize test plan and write <u>test cases</u>

Testing Test execution, bug reporting, manual and automated; Regression

Deployment Test report is prepared

Maintenance Maintenance testing

Manual vs Automation



Manual vs Automation

Manual

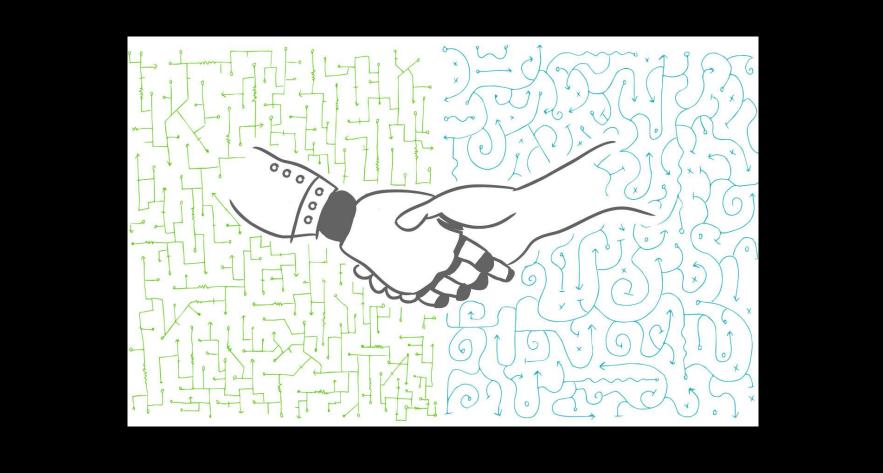
- → Black/White/Gray Testing
- → Functional & Non Functional testing
 - ◆ Installation, Compatibility, Smoke and sanity, Regression, Acceptance, Alpha, Beta, Continuous, Destructive, Software performance, Usability, Accessibility, Security, Internationalization and localization, Development, A/B testing
- → Exploratory
- → Time as major resource
- → Human important resource

Manual vs Automation

Automation

- → User stories coded and ran daily/weekly/per new buildy
- → Can not cover undefine user stories
- → Doesn't get creative on its on
- → Time as major resource
- → Storage & machines/devices
- → Set of data
- → Fail test -> ?





It's possible to fly without motors, but not without knowledge and skill



Wilbur Wright

What skills do you need for this role?

- → Attention to details
- → Analytical thinking
- → Independence
- → Proactivity
- → Ownership
- → Logical thinking
- → Creative
- → Continuous learning
- → Efficient communication
- → & so many other...



"It's curiosity."

Challenges

- → Define clear steps to reproduce for intermittent bugs
- → Be creative enough to catch important bugs via exploratory testing
- → Accommodate working with different timezone
- → Not clear documentation / requirements
- → Unstable environment
- → Lack of feedback loop
- → Testing under time constraints
- → Working on several projects in the same time

A day in the life of a tester

- → Coffee
- → Mails, Sprint Meetings (planning, daily, review, retrospective)
- → Testing
 - Exploratory & Automated tests runs / Investigate failures
 - Smokes, Sanity Checks, Sign Offs
- → Features
 - Discussion with product / devs to get info on existing user stories
 - ◆ Component watch, Test Plan & Health
- → <u>Bug Activities</u>
 - Log issues, Triage, NI, Debugging,
- → Meetings, meetings
- → .. more coffee.. or beer.. or wine..



"TESTING IS ONE OF THE MOST CREATIVE JOBS YOU CAN HAVE IN IT"

"ADVOCATE OF USERS"

"I DID NOT CHOOSE THE QA LIFE, THE QA LIFE CHOSE ME. AND YES IT IS NOW A LIFESTYLE MORE THAN A JOB"



Don't be the sheep! Be the wolf fox!



Photo credit.

http://webcompat.com/

BUG REPORTING FOR THE WEB.





UX Testing.



How..

- → Attention to details
- → Hallway testing
- → Remote usability testing
- → Expert review
- → Automated expert review
- → A/B testing
- → A11y?



A/B

- → Offering share experience mostly with two (or more) skins
 - ♦ Banners, actions, etc
- → Useful mostly in marketing/sales but not only
- → Looks for user retention/interaction
- → Analyse correctly
 - ◆ Be sure u can define easily the difference in user data
 - Bounded in time and one action



Alpha/Beta testing

- → Set preview builds ex: Nightly/Firefox Preview
- → Hallway testing give the app to a random person
- → Remote usability testing give the app/site to people from different areas (geographical, expertise, domain)
- → Expert review make an audit
- → Gather telemetry data/crashes etc



- Scope of work
 Recruit users
- c. Identify objectives
- d. Establish metrics

- a. Observe users
- b. Identify issues
- c. Identify solutions
- d. Interview users

- a. Assess user behavior
- b. Analyse user click path
- c. Identify problem areas
- d. Assess navigation

- a. Review video footage
- b. Identify design isssues
- c. Identify best practices
- d. Design recommendations

Let me be clear..

- → Do research
 - ◆ Who is your user/ diverse user range
- → Share the insights
 - ◆ Kill the presumption that everyone knows
- → Build up specs
 - Draw, build, showcase
- → Keep in touch
 - Check progress
- → Teach
 - ◆ Share knowledge to others too

A11y



What?

- → Vision Disability Complete Blindness or Color Blindness or Poor Vision; Visual problems like visual strobe and flashing effect problems
- → Physical Disability Not able to use the mouse or keyboard with one hand; Poor motor skills like hand movements and muscle slowness
- → Cognitive disability Learning Difficulties or Poor Memory or not able to understand more complex scenarios
- → Literacy Disability Reading Problems
- → Hearing Disability Auditory problems like deafness and hearing impairments; Cannot able to hear or not able to hear clearly

Why..

- → Define corectly A11y
- → Regulations
- → Users data sets
 - ◆ You do have them, trust me
 - ♦ New ones
- → No ROI
- → No money, honey
- → Doing favors vs doing your job

How

- → Color Contrast
- → Patterns & Colors
- → <u>Typography</u>
- → Animations
- → <u>Semantic</u> elements in order/a11y tree/ Page structure/ Menu nav & list
- → Alt input links, images, etc

Tools

- → Close your eyes and try to navigate
- → JAWS, Orca, Voice Over.
- → <u>Lighthouse</u>
- → Wave
- → Tota11y
- → My ex:
 - ◆ 3 different OS + mobile => 4
 - ◆ 2 browsers + mobile => 3
 - Different Machines / Monitors

This should be a nice UX right?

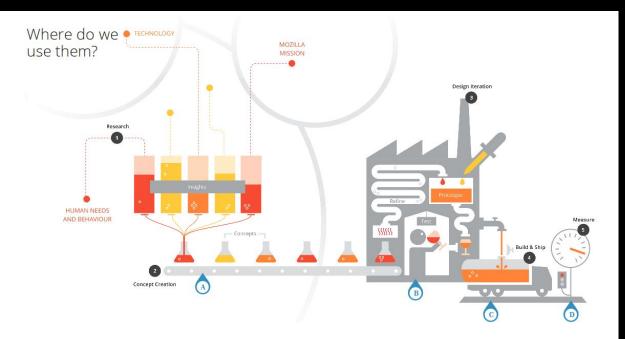
Firefox User Experience



https://design.firefox.com



VALUES:



- (a) Values help us filter and choose what design opportunities to Walues shape our design decisions as we refine and test
- O Values guide us through implementation tradeoffs, and
- Values help establish what

https://design.firefox.com/values







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http://bit.ly/Testing-SUXM

Let's fix the world one bug at a time!