

# Vývoj intuitivních uživatelských rozhraní

PV278

každé pondělí 9-12



Red Hat

MUNI  
FI



Red Hat

# What we'll discuss today

- Intro
- UX & UI in RH
- Course requirements
- Communication channels
- Teamwork - final project
- Why do we teach
- What is UX

# Ahoj!



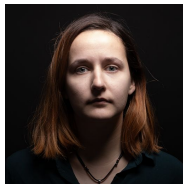
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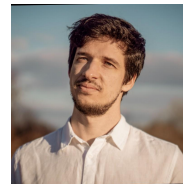
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# Introduce yourself





## Red Hat

- Open source technologies for enterprise
- Headquarters in Raleigh North Carolina
- Acquired by IBM in 2018
- Operating as a separate business unit
- Globally employs 13400 people
- Red Hat Czech in Brno - 1400 people
- Open leadership



## Red Hat UI

Multiple web UIs - and multiple teams

Multiple frameworks

Custom component library - [Patternfly](#)

141

UXDers



13

Red Hat offices



8

Countries



## Red Hat User Experience

Interaction design

Visual design

User research

UX content design

Front-end development

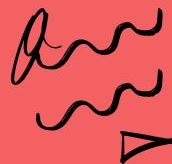


## Ataccama

- Ataccama is a global software company delivering a unified platform for automated **data quality**, **MDM**, and **metadata management**—Ataccama ONE.
- Headquartered in Toronto, we're in 10 cities around the world, the largest, R&D office is in Prague.
- **500+** of us (and counting) from 22+ countries and 6 continents



MUNI  
FI



# VÝVOJ INTUITIVNÍCH UŽIVATELSKÝCH ROZHRAŇÍ



BEST CLASS EVER

Kód předmětu PV278  
Každé pondělí 9-12



# Intuitive development and user experience

## Cíle předmětu

Cíl tohoto předmětu je představení User Experience (UX) Designu a Front-end technologií s hands-on experience na projektu s reálnými daty. Tento předmět představí základy user-centered designu a provede studenty praktickými technikami, kde pochopíme potřeby našeho konečného uživatele.

Tento předmět je určen pro začátečníky, kteří se chtějí dozvědět více o “user experience” nebo “user interface”. Student pochopí, proč je důležité přemýšlet o potřebách uživatele a pak se naučí daný intuitivní postup aplikovat na svém projektu. Budeme tvořit prototypy a potom na jejich základě implementovat projekt s využitím aktuálních technologií. Na projektu se bude průběžně iterovat a výstupy se budou testovat na uživateli. Studenti budou provedeni správným postupem k vytvoření user-friendly uživatelského rozhraní.

## Osnova

1. Introduction
2. Intro to UX and design thinking AND UX research 1: User Needs
3. Javascript practices - old and new
4. Wireframing and prototyping 1
5. Wireframing and prototyping 2
6. React + Redux
- 7. UX feedback and Iterations (present your designs - 11. 11.)**
8. Deployment, Charting and JWT
9. UX research 2: User testing
10. Micro Frontend
11. App testing
- 12. Presentations and Critique (16. 12.)**

\*subject to flexible change

## Communication tools

- **Gitlab**  
<https://gitlab.fi.muni.cz/qhala/dashboard-PV278>
- **Slack** (preferred)  
fi-muni-rejnoci.slack.com  
When you log in - say hi to #general  
Invite link - <https://fi-muni-rejnoci.slack.com/join/signup>
- **Email**  
[khala@redhat.com](mailto:khala@redhat.com)  
[msviriko@redhat.com](mailto:msviriko@redhat.com)  
[fhlavac@redhat.com](mailto:fhlavac@redhat.com)  
[vrzal.ja@gmail.com](mailto:vrzal.ja@gmail.com)

## What you should have in your skillset after this class

- UX tools such as research, prototyping & wireframing
- Ability to conduct your own user testing
- Processes to create better user experience
- Know how to write React app and components
- Data flows in JavaScript
- Basic understanding of build tools
- User testing how it works

# Final project - UX

## UX part

- Define a problem
- Personas
- Sketches and prototypes
- Usability testing feedback captured and incorporated

# Final project - UI

## UI part - 60 points

- Show overview of information and activities
- Visually showcase data trends and patterns
- Interact with data
- Display information about specific entity
- See user profile
- User login is mandatory - no need to update login screen
  
- **Homeworks - 40 points**
  - Download and run project - 6.10.2024
  - Deploy application - 3.11.2024
  - Navigation and user profile - 17.11.2024
  - Chart/Table/interactive element - 1.12.2024

# Homework 1

- Download and run project - <https://gitlab.fi.muni.cz/qhala/dashboard-PV278>
- Record a short video and submit it to the IS homework vault
- **Deadline 6.10.2024**



## Final project variables

- Population and Demography
- Internship for students
- Search for employment opportunities
- Voting system for citizens a game
- Citizen portal

**Teamwork is the dreamwork**



# What is user experience?



Think about the last  
time you took a tram



Design

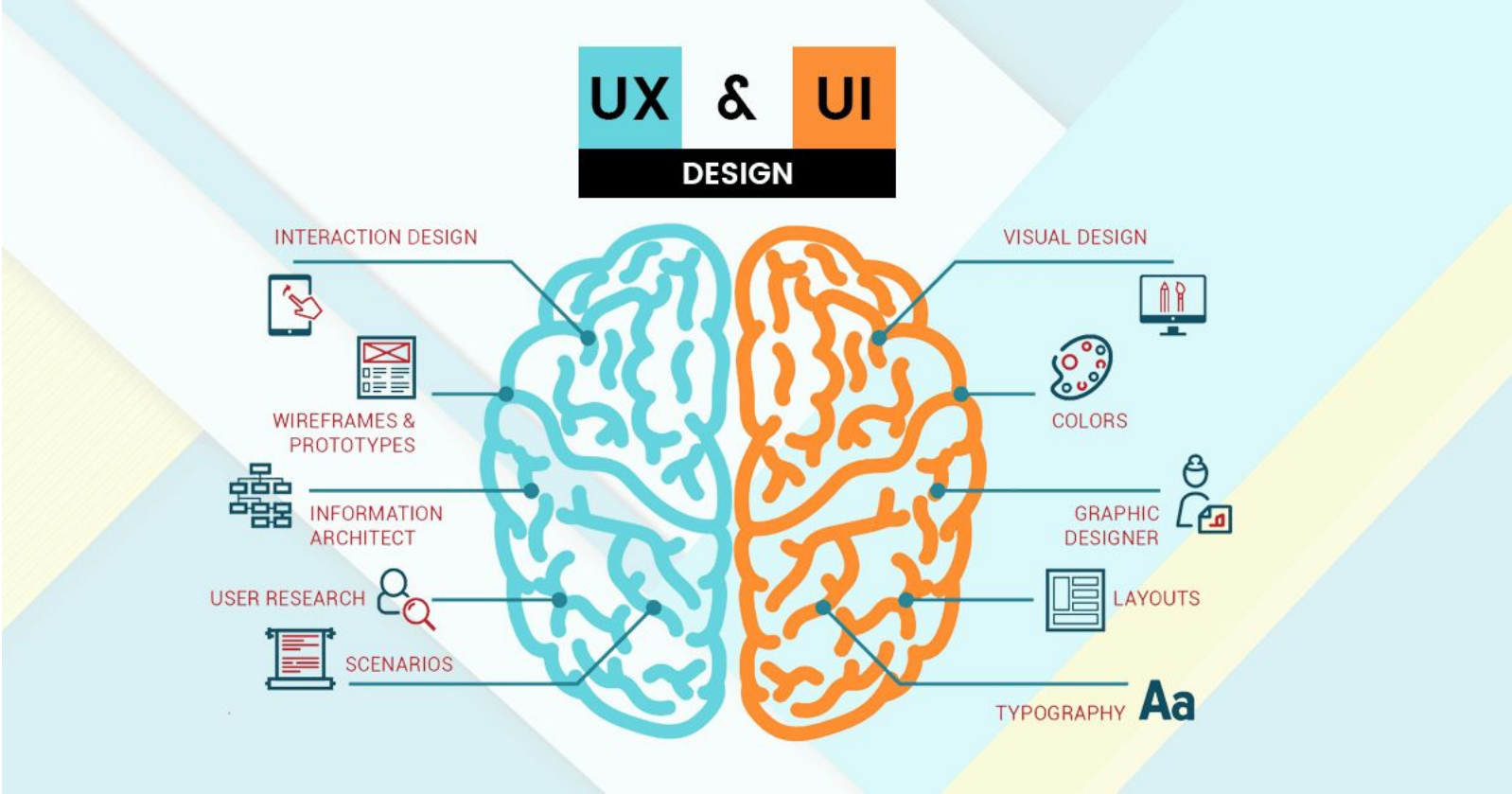
User experience

# UX Design

The process of creating end to end  
experience between user and a  
product/service/system



# The difference between UX and UI



消防栓  
HYDRANT











www.ARNGREN.net

el-Kjøretøy Teknologi & Gadgets



el-biler til barn

(Fra 07.11.2004)  
< Friluft i sin Fly-Bil

Search el-retur

Slik Betaler du

el-Kjøretøy



Bygg ditt eget  
2-seters Helikopter.  
kr. 398.000,-



Kikkert med  
Digital-Kamera  
& LCD skjerm.  
kr. 1598,-

Akvarium  
Alarm  
Alarmer  
ATV (el.)  
Bildelenser  
12.998,-  
Bil, el-bil  
Bilbane  
Biljardbord M/bor  
Djagel-Kikkert  
Disko-Lys  
DVD-Spieler  
el-Bil-barn  
el-Bil-3-hjul  
Elektronikk & DAB  
el-Scoter & Bil  
el-Sykkel-1, 2  
Fatbike-el  
Fluor  
GoKart-Pedal, el  
Golf-biler (m/skilt)  
Hobby & RC  
Hoverpod  
HP-Måler (Bil)  
Kikkert  
Kjøretøy-el  
Kompass (Bil/Bat)  
Lader-230Vac  
Luft-Jekk  
Lys  
Moped-el  
Motorsykkkel-Mini  
Omformer  
Oversetter  
Gressklipper  
Raket-Fly  
RC-Produkter  
Robot-Slevesuger  
Roboter  
Solceller  
Snefreser  
Sljerne-himmel  
Sykkel-el, 1, 2  
Tjopbane (til PC)  
TV-Ut- & Armb. Ur  
Walkie Talk

el-fatbike 750w 6.998,-  
4WD Nyhet!  
12V 24V 48V  
fra kr. 1.798,-

Ingen aldersgrense.  
el-scooter-sykkel 9.998,-  
3-hjul el-Cargo-Bike  
Biler til barn

EI-ATV til Barn & Voksne.  
fra kr. 3998,-

el-Sykkel 1.599,-  
el-ATV 3.998,-  
4998,-  
el-scooter 4WD Land Rover 3.999,-  
EI-Biler til Barn, Ungdom & Voksne

el-Bil; Cross-Rider  
fra kr. 89.998,-

3-hjuls moped-bil CabEasy.  
Godkjert for: 3-personer.  
Fart: 45km/t  
Range 70 km  
fra 59.998,-  
el-bil (Sertifikat-fri) 3-hjul kr. 39.998,-

Fatbike-500w  
Luft-Jekk  
el-sykkel med skivbremser  
Luft-jekk (4.2 tonn) til Bil eller Båt.  
fra kr. 998,-

4WD 3-hjuls el-cargobike Dansk kr. 16.998,-  
RC Tank. Metall 55 cm med Luftkanon fra kr. 2.998,-  
Torro  
el-ATV

3-hjuls el-sykke. Designet & Produsert i Danmark.  
Store-hjul. Meget-stabil.  
fra kr. 15.998,-

Kikkert 20-144x, Teleskop 2998,-  
el-Fatbike Litium-batteri 14.998,-

el-fatbike Sammenleggbar 12.998,-  
750w/48v  
el-sykkel 7.998,-  
Fatbike-1500w 16.998,-

el-bil kr. 79.998,-

el-ATV

el-ATV

el-Moped 12.998,-  
Pedal-GoKart Mercedes

el-Moped

Elektrisk-Fat-bike (1000w)

- Elektriske-Kjøretøy  
- Elektrisk-ATV - Roboter  
- el-biler til barn/ungdom  
- Solcelle-produkter  
- Forbruker Elektronikk  
- el-Sykkel & el-Moped  
- Batterier & Ladere, etc  
- RC-produkt - Rakett

el-Jeep Willy-type, med 60V/1500w motor. 6 eller 40km/t kr. 39.998,-  
4WD

4WD, 3-seters Willy, med Gummihjul. kr. 5998,-  
Biljardbord, Spisebord lett kr. 5.998,-

EL-Scoter 5000 watt kr. 29.998,-  
1000kmt  
EL-Scoter 5000 watt kr. 29.998,-  
1000kmt

Styrenehet & Fordelere til Bil fra kr. 298,-  
Fotball-Trener fra 2.598,-

Kikkert- Zoom & Teleskop Fra 20x til 125x 2x80 mm lysåpning. Lengste & Kraftigste. kr. 2998,-  
Star Wars : R2-D2, Web-cam, Projektor, DVD fra kr. 1998,-

2-seters 4WD

AMG

el-Jeep Willy-type, med 60V/1500w motor. 6 eller 40km/t kr. 39.998,-

4WD, 3-seters Willy, med Gummihjul. kr. 5998,-

Elektriske Biler

EI-Bil: Comarth 2WD/4WD 2 eller 4 seter fra kr. 89.998,-

750w

el-Fatbike Sammenleggbar. 48V/750w, 500w, eller 250w. Børsteles-motor, med Litium-batteri. Pris fra kr. 12.998,-

Gratis Mobilal-Spil

Elektrisk Porsche Topptart: 250 km/t 0-100 : 4,9 sec. 300 km Fra kr. 399.890,-

Litium eller Bly-Batteri

3-Hjuls el-sykkel

Værhane-Fly (60cm) med Lys og Solceller kr. 998,- Nyhet !

Luft-jel til Bil eller fra kr. 998,-

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Search

6,7hk

JOHN DEERE

Elektrisk-Fat-bike (1000w)



# PARKING SCHEDULE

	M-F	SAT	SUN
7am			
8am			
8 <sup>30</sup> am			
4pm			
7pm			



DESIGNING THE  
PRODUCT



DESIGNING THE  
EXPERIENCE

Designing a product  
vs.  
Designing an experience

# Draw a bicycle



Draw the most comfortable way how university student can get to the school in the winter.