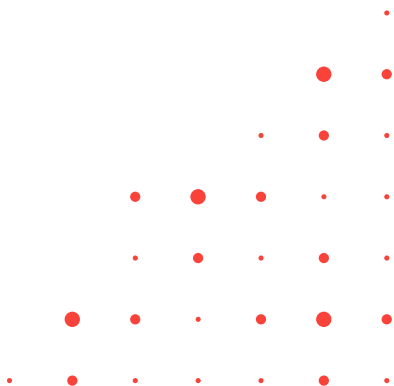# Welcome Workshop

TIEA3290 Mobiilisovellus, 3 op, Mobiilisovelluksen toteuttaminen ideasta sovelluskauppaan

Welcome workshop agenda

- Welcome and introductions

- Course timetable

- Course tools

- Presenting application ideas

- Teaming

- 2 goals:
  - When you leave to session you have team and idea
 - Team has first steps agreed and short plan (team agreement)

Course timetable

- 24.1.2023, 14.00–18.00 Course kick off
  - Teams, ideas, timetable, roles in the team

- 9.2.2023, 14.15–18.00 Design and Planning workshop

- 13.2.2023, 14.15–18.00 Development and QA-workshop 1
  - Development practicalities
  - Showing designs
  - Getting things started

- Coding Clinique
  - 1 hour
  - Weekly each Thursday starting 23.2. and ending 30.3.

- 13.4.2023 Development and QA-workshop 2
  - Finalization

- 27.4.2023 Deadline
  - Final party if the app is released
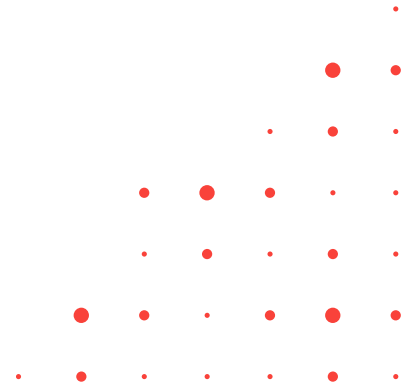
"Expectation vs. Reality"
"Long-term goal vs. MVP"
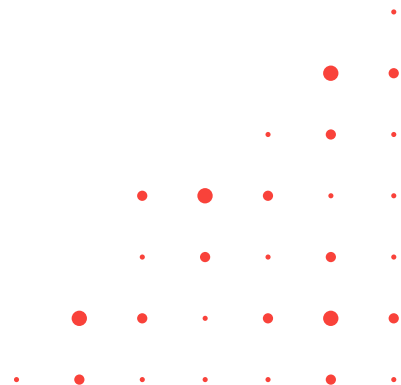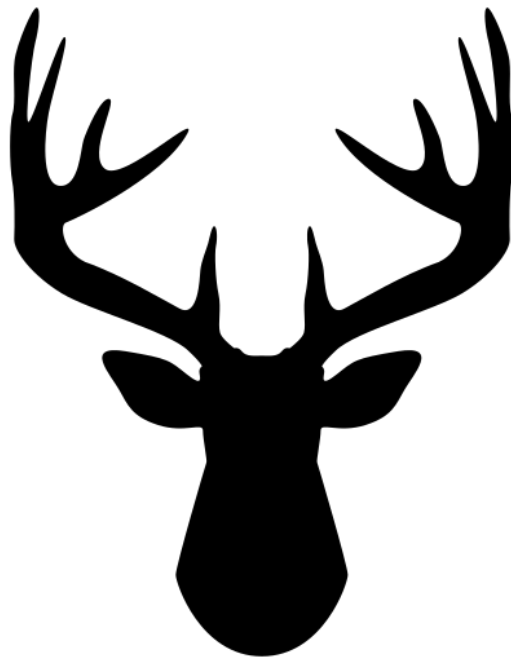
Why native mobile app?

Capabilities

- Camera + Qr

- NFC

- Location

- Easy login

- Integration to platform

- Security

- Notifications

Contextual factors

- Location independency

- Microinteractions:
  small, well defined tasks

- Sudden needs

- Limited time

- Limited screen size

- Accessibility limitations such as single handed use

- Long periods between uses

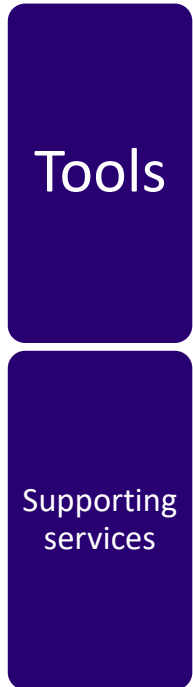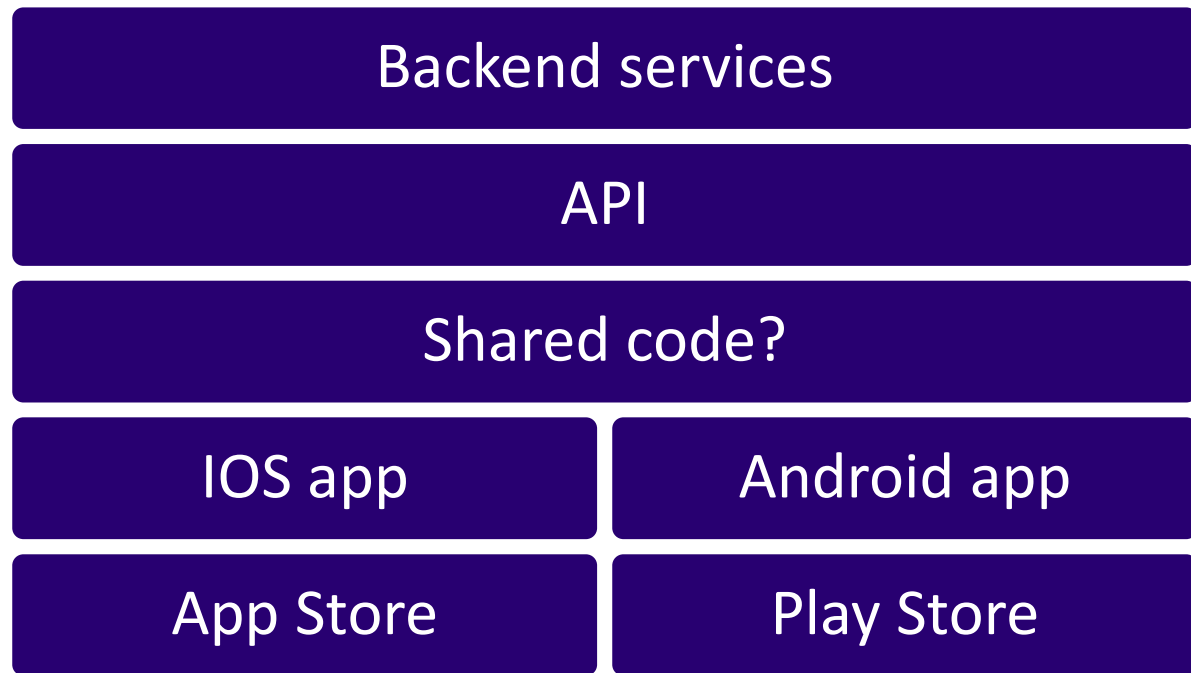# Mobile App development phases in this course

- Idea + Team (Today)

- Plan + Design (Design workshop)

- "Hello World" distribution (Dev & QA workshop)

- (CI/CD)

- ...intensive development...

- App Store / Google Play store review

- Publishing the app

Not required on this course:
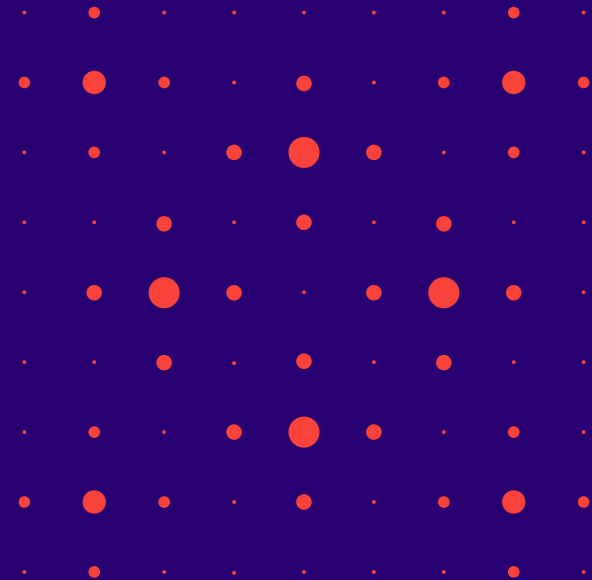
- Unit tests

- Test automation

- Documentation

In order to get credits from the course the team needs to have the mobile app published in App Store / Google Play Store and we have received your individual learning report.

Tech scope high level

Backend services

API

Shared code?

IOS app

Android app

App Store

Play Store

Tools

Supporting services

Welcome

Tietoevry Create

Internal

A global partner for business design, data and software engineering

Tietoevry Create is a leading accelerator to customers' digital products and business models

We combine design and software engineering to create new experiences and growth opportunities for our clients.

With data, cloud and the latest technologies as the foundation, we use our diverse global skills to accelerate innovation and reinvent how businesses create sustainable value.

More than **9000** creative developers of digital futures

A diverse team of **65+** nationalities living in **19** countries

Co-creating sustainable value with more than **3 000** customers worldwide

The leading accelerator for digital innovation and sustainable value creation

Our offerings

- Agile business design and innovation
- Data engineering and analytics
- Customer experience and e-commerce
- Application design and development
- Cloud architecture and cloud native development
- Advanced software engineering and R&D

How we create value

Empowering customers across all aspects of their digital business
Increasing value-of-innovation and decreasing time-to-market

Bringing agility and speed to our customers' digital innovation
Providing the fastest access to latest cloud and data technologies

Providing customers with a unique competitive edge
Outcomes built on deep customer and domain knowledge

Delivering on large scale and complex projects to reinvent digital services, products and experiences
Utilizing the most impactful network of cloud, data, software development and advanced engineering professionals

We deliver great Mobile Experiences

Tietoevry Mobile Solutions provides all services required to deliver great Mobile Experiences – from advisory to running the services.

We help our customers to find and implement new opportunities brought by mobility.

- Mobile advisory and consulting
- Mobile solution design and UX
- Mobile solution implementation services
- Continuous services and maintenance

Trusted mobile development partner in Nordics

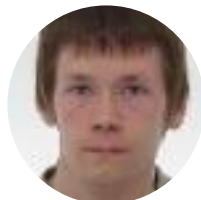Over 20 mobile experts in Jyväskylä

Introductions

Henri Suutarinen

Team Lead

Toni Hintikka

Project Manager

Jani Lirkki

Lead SW Developer

Jani Kerttula

Senior SW Developer

Prafull Sanas

Senior SW Developer

Timo Tarvainen

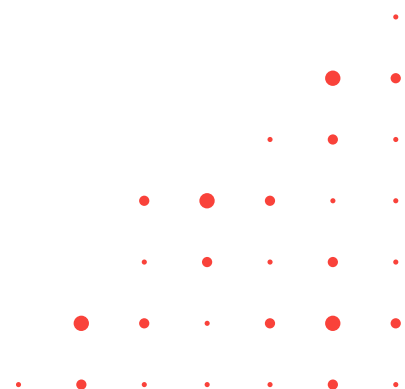Senior Test Engineer

Marko taali

Lead UX Designer

Petri Tillikainen

Senior UX Desinger

What Tietoevry Create team does?

- Support you in
  - Industry best practises
  - Scoping and priorisation
  - Weekly coding clinics
  - best effort support in Slack.
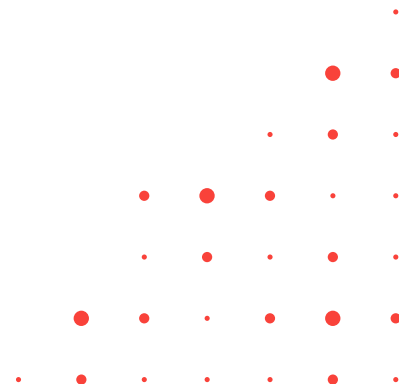- We don't do your work ☺

Introduction bingo

Get in the teams

Course tools

- Git Repo. Github Gitlab.

- Task management tool
  - Github Project, Trello

- Communication
  - Slack
  - Teams for meetings
  - Official messages to mail

Agile way of working

- We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions** over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

- That is, while there is value in the items on the right, we value the items on the left more.

https://agilemanifesto.org
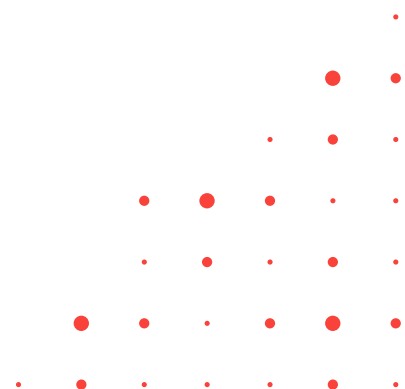
Team agreement

- After you have get into your team you need to decide how do you work

- Develop sense of shared responsibility

- Increase members' awareness of their own behavior

- Enhance the quality of the group process.

- **We make commitments as a team**. We will be held accountable to our commitments. – we work as a team to make a commitment and deliver on it.

- **Incomplete stories are not good** – it is better to help get an existing <u>story</u> to "done" than to start another story that can't be finished in the current sprint.
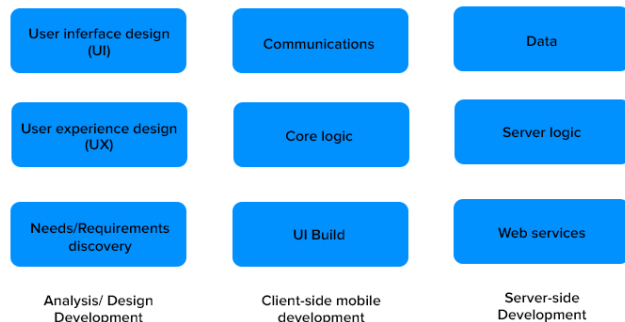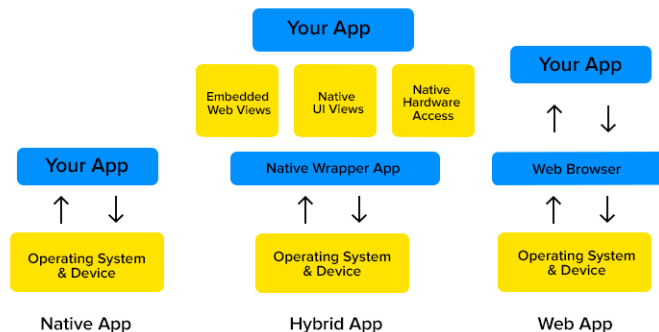
Technology

Tech Stacks to Launch Your App

- https://appinventiv.com/blog/technology-for-mobile-app-development/

Mobile Application Technology Layers

User inferface design (UI)	Communications	Data
User experience design (UX)	Core logic	Server logic
Needs/Requirements discovery	UI Build	Web services
Analysis/ Design Development	Client-side mobile development	Server-side Development

Mobile App Technology Stacks

Native App

Your App
↑ ↓
Operating System & Device

Hybrid App

Your App
Embedded Web Views | Native UI Views | Native Hardware Access
Native Wrapper App
↑ ↓
Operating System & Device

Web App

Your App
↑ ↓
Web Browser
↑ ↓
Operating System & Device

Tech Stack: Overview Of The Top Technologies of 2022

- https://www.freelancermap.com/blog/tech-stack/
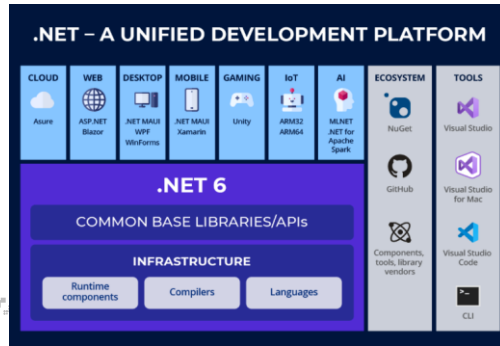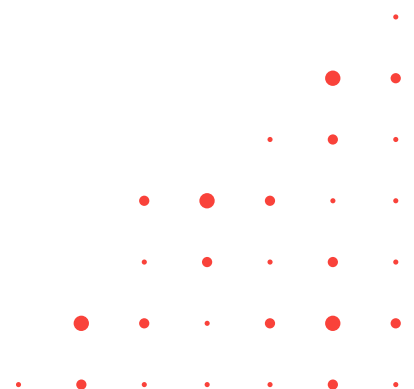

.net option/
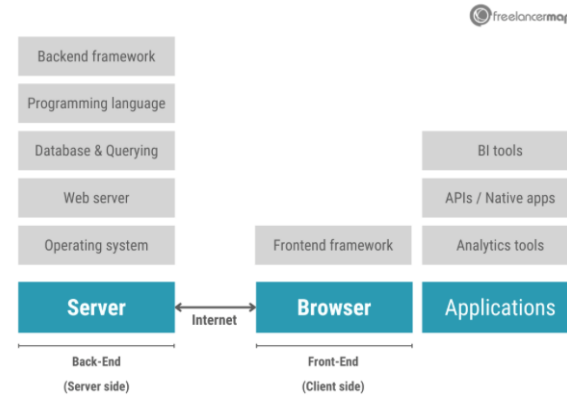
Example: Modern tech stack

Native app options

- Native iOS

- Native Android

- Cross platform application
  - Flutter
  - React Native   (link to comparisation article)
  - .NET Multi-platform App UI (https://dotnet.microsoft.com/en-us/apps/maui)

First tasks of the team

- Team members listed with team roles

- Team has the idea

- Team practicalities (code repo, meetings, communication)

- First team meeting agreed. Do the Homework.
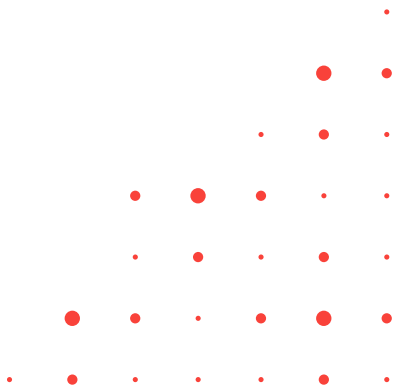
Design Homework

Homework: Challenge Statement
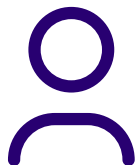
Phase 1: Understand

Goal

Create... a tool that...

Solves x... for launch in Q2...

for defined users.
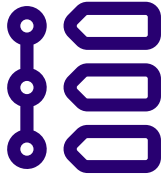
User type

Defined user

Platform

Mobile

Timeframe

By June

tietoevry

Internal

Homework: Deliverables

Phase 1: Understand

Your deliverables here

Mobile app designs

Project plan

Mobile application code

Etc.

Thank you

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