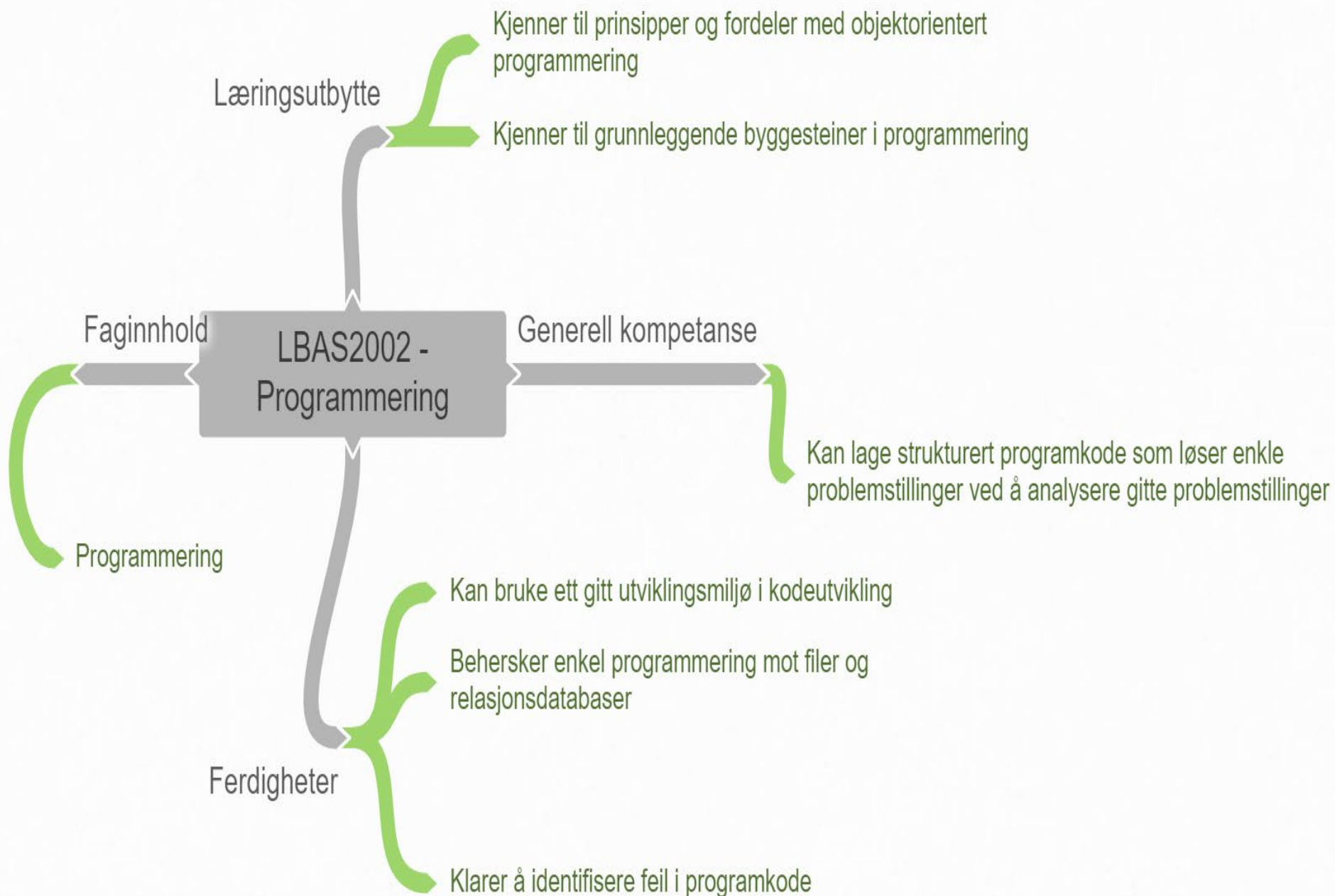


LBAS2002 - Informatikk

Programmering

Leksjon 1: Introduksjon

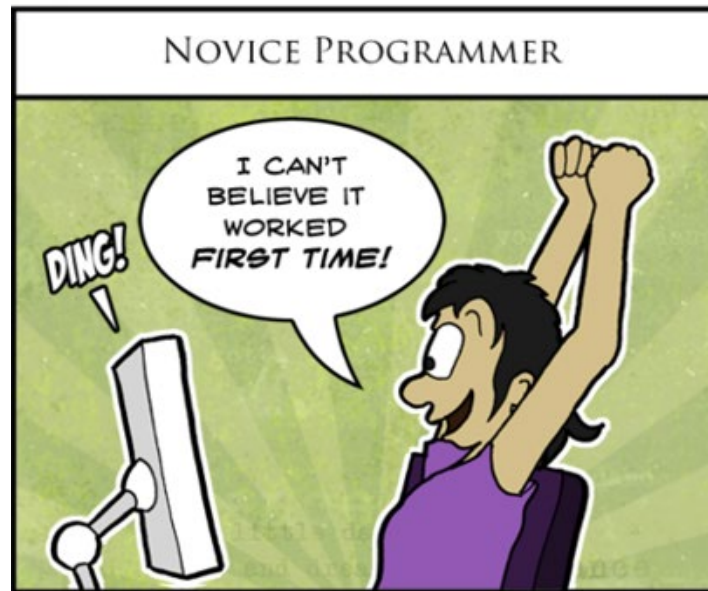


Pensum

- Se Blackboard
 - Leksjon: Datatyper. Tilgjengelig fra <https://ntnu.blackboard.com>
 - Leksjon: Kontrollflyt. Tilgjengelig fra <https://ntnu.blackboard.com>
 - Leksjon: Databaser. Tilgjengelig fra <https://ntnu.blackboard.com>
 - Leksjon: GUI. Tilgjengelig fra <https://ntnu.blackboard.com>

Undervisningsmål for idag

- Forelesning:
 - Hvorfor skal vi lære programmering?
 - Gi en kort introduksjon til programmering generelt
 - Grunnleggende programmerings konsepter i Python
- Lab:
 - Installerer utviklingsmiljø
 - Skrive ditt første program



Hva er programmering?



Programming for alle?

- Information literacy and digital competences
 - must be considered as fundamental competencies (like read, write and calculate)
- The UNESCO (Catts & Lau, 2008) considers information literacy “a basic human right”
- ALA (American Library Association, 2006) calls it a “survival skill in the information age”.

Programmering for alle?

- Fremtidige jobber
- Henge med i vår egen verden
- Algoritmisk tankegang

⇒ Leaders and trend-setters all agree on one thing (<https://code.org/quotes>)

Typer av programvareutvikling (noen eksempler)

- Web Development
- Mobile Development
- Data Science
- Application Development
- Front/Back-end Development
- Software Tools Development
- API Development
- Embedded Systems Development
- Security Software Development
- Cloud Computing



Python

- Python er et høynivå språk
- Python er interaktive
- Python er Object Orientert



Python dokumentasjon

<https://docs.python.org/>

Download

Download these documents

Docs by version

Python 3.11 (in development)
Python 3.10 (pre-release)
Python 3.9 (stable)
Python 3.8 (security-fixes)
Python 3.7 (security-fixes)
Python 3.6 (security-fixes)
Python 3.5 (EOL)
Python 2.7 (EOL)
All versions

Other resources

PEP Index
Beginner's Guide
Book List
Audio/Visual Talks
Python Developer's Guide

Python 3.9.6 documentation

Welcome! This is the official documentation for Python 3.9.6.

Parts of the documentation:

What's new in Python 3.9?

or all "What's new" documents since 2.0

Tutorial

start here

Library Reference

keep this under your pillow

Language Reference

describes syntax and language elements

Python Setup and Usage

how to use Python on different platforms

Python HOWTOs

in-depth documents on specific topics

Installing Python Modules

installing from the Python Package Index & other sources

Distributing Python Modules

publishing modules for installation by others

Extending and Embedding

tutorial for C/C++ programmers

Python/C API

reference for C/C++ programmers

FAQs

frequently asked questions (with answers!)

Indices and tables:

Global Module Index

quick access to all modules

General Index

all functions, classes, terms

Glossary

the most important terms explained

Meta information:

Reporting bugs

Contributing to Docs

About the documentation

Search page

search this documentation

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lists all sections and subsections

History and License of Python

Copyright