

## Synopsis Proposal

Website for calculating principal when taking out a mortgage loan.

## Included Features

- Function for calculating the principal, which is dependent on bank- and bond-fees and user inputs
- The user inputs are: loan amount, own downpayment and current bond price
- The user selects a bank from a drop down menu

## UI

A single webpage showing

- A dropdown menu where the user can select a bank (TotalKredit or RealkreditDanmark)
- Input fields
  - o Loan amount
  - o Own downpayment
  - o Current bond price
- Calculate button
- The calculated principal is shown on the website

## Backend – Done in Python

### Focus on

- Structuring code similar to .NET MVC
- Implement code according to the SOLID principles
- Unit test parts of the principal calculation function via data-driven unit testing
- Test the principal calculation function using a mocking framework
- Blackbox testing / BDD testing like specflow: use Gherkin to test the principal calculation function