**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
  + Loan amount
  + Own downpayment
  + 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