**Sopra Technical Test - Demonstration**

Frontend Architecture



More Improvements

* App.js only responsible for navigation (routing)
* Create folder structure for controller, factory or service
* Define frontend view model
* Angular controller level unit testing

Server Side Architecture

View Model

Repaymant

ViewModel

Client (Views)

API Controller

Api/Repaymant

Controller

Home

Unit Test

RepaymentServiceTest

Interface (IRepaymentService)

Service (RepaymentService) ( calculation methods / logic)

Core Model

Repayment

More Improvements

1. More user-friendly naming conventions (I did not refactor because of limited time)

Ex – GetMonthlyPaymentAmount, GetTotalAmountNeedToBePaidBack, etc.

1. DTO in service returns – depends on the scope and scalability
2. Core Model Validations – Use FluentValidation – In case of any other 3 rd. party direct access to API
3. Dependency Injection
4. More unit test coverage
5. Log files – easy maintenance (Log4net , etc.)