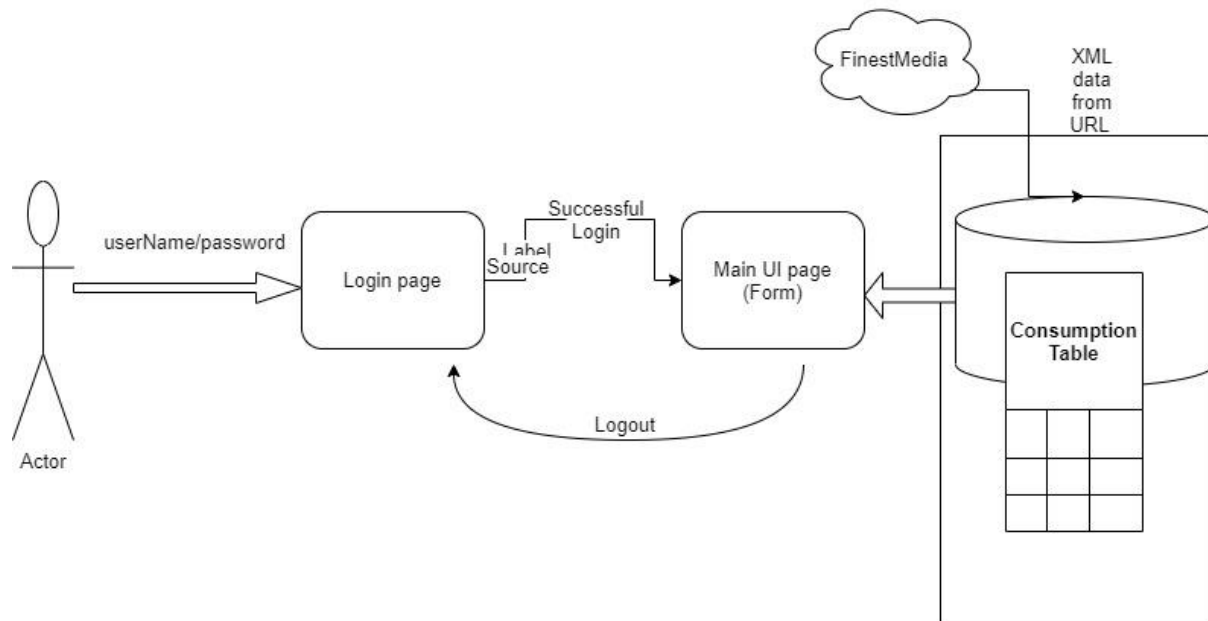# FINESTMEDIA Home Task

This document can be used to understand the UI at a high level.

High Level Design

Login Screen: The default username and password: john/john

Energy Consumption Dashboard

This dash board UI tool can be used to monitor the energy consumption with respect to price for a specific.

Log in

Username

john

Password

.... 👁

Log in

Forgot password

Main UI:

Data is fetched from the back end loaded in H2 database and eventually used to populate the form.

Submit   Reset   LogOut

Customer energy consumption data

Document Identification ⇅	Document Date Time ⇅	Accounting Point ⇅	Measurement Unit ⇅	Measurment Price ⇅
1620942737	2019-05-29T12:00:00+03:00	54EA-5481353548-U	KWH	0.22
1620942737	2019-05-29T13:00:00+03:00	54EA-5481353548-U	KWH	1.31
1620942737	2019-05-29T14:00:00+03:00	54EA-5481353548-U	KWH	1.33
1620942737	2019-05-29T15:00:00+03:00	54EA-5481353548-U	KWH	1.35
1620942737	2019-05-29T16:00:00+03:00	54EA-5481353548-U	KWH	0.67
1620942737	2019-05-29T17:00:00+03:00	54EA-5481353548-U	KWH	0.26
1620942737	2019-05-29T18:00:00+03:00	54EA-5481353548-U	KWH	0.51
1620942737	2019-05-29T19:00:00+03:00	54EA-5481353548-U	KWH	1.37

Customer energy consumption data

Document Identification	Document Date Time	Accounting Point	Measurement Unit	Measurment Price
1620942737	2019-05-30T21:00:00+03:00	54EA-5481353548-U	KWH	0.63
1620942737	2019-05-30T22:00:00+03:00	54EA-5481353548-U	KWH	0.68
1620942737	2019-05-30T23:00:00+03:00	54EA-5481353548-U	KWH	1.38
1620942737	2019-05-31T00:00:00+03:00	54EA-5481353548-U	KWH	0.92
1620942737	2019-05-31T01:00:00+03:00	54EA-5481353548-U	KWH	1.21
1620942737	2019-05-31T02:00:00+03:00	54EA-5481353548-U	KWH	0.44
1620942737	2019-05-31T03:00:00+03:00	54EA-5481353548-U	KWH	1.35
1620942737	2019-05-31T04:00:00+03:00	54EA-5481353548-U	KWH	0.21
1620942737	2019-05-31T05:00:00+03:00	54EA-5481353548-U	KWH	0.19

Input date.. 🗓 filter kw/h price ..

Followed best practices in terms of design and Java concepts.

Assumptions:

- ✓ Maximum price value is 5.0
- ✓ Price value can never be negative for which currently a dialog pop is shown.
- ✓ Currently there is no security in the tool which can be taken as improvement for future.
- ✓ H2 data bases is used to load the initial seed data after parsing the xml received from the end point.
- ✓ Caching has been used for increasing performance.
- ✓ Vaadin UI is used for quick development.
- ✓ Unit testing is done in addition to application testing.