Evidence for Analysis and Design Unit.
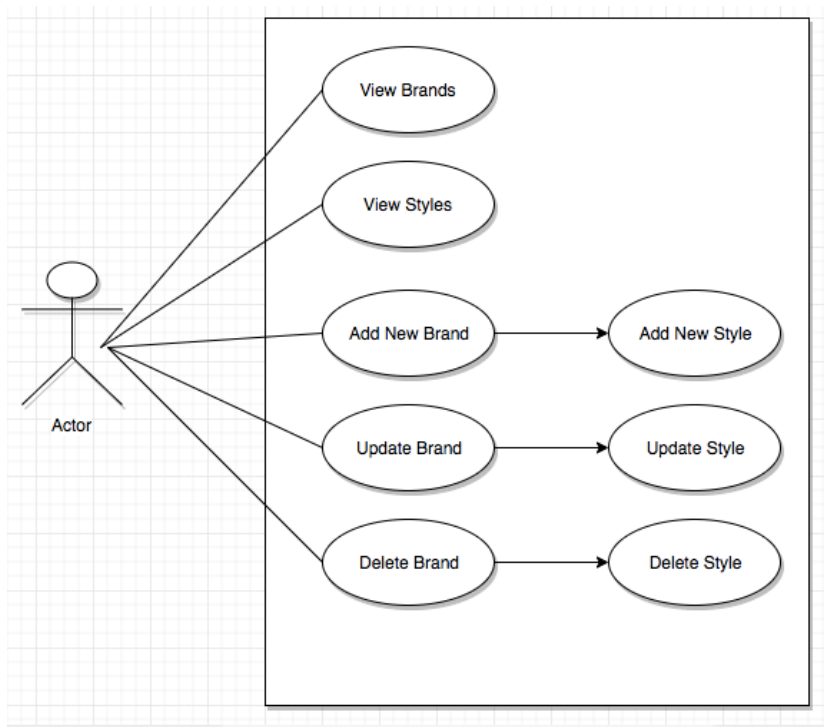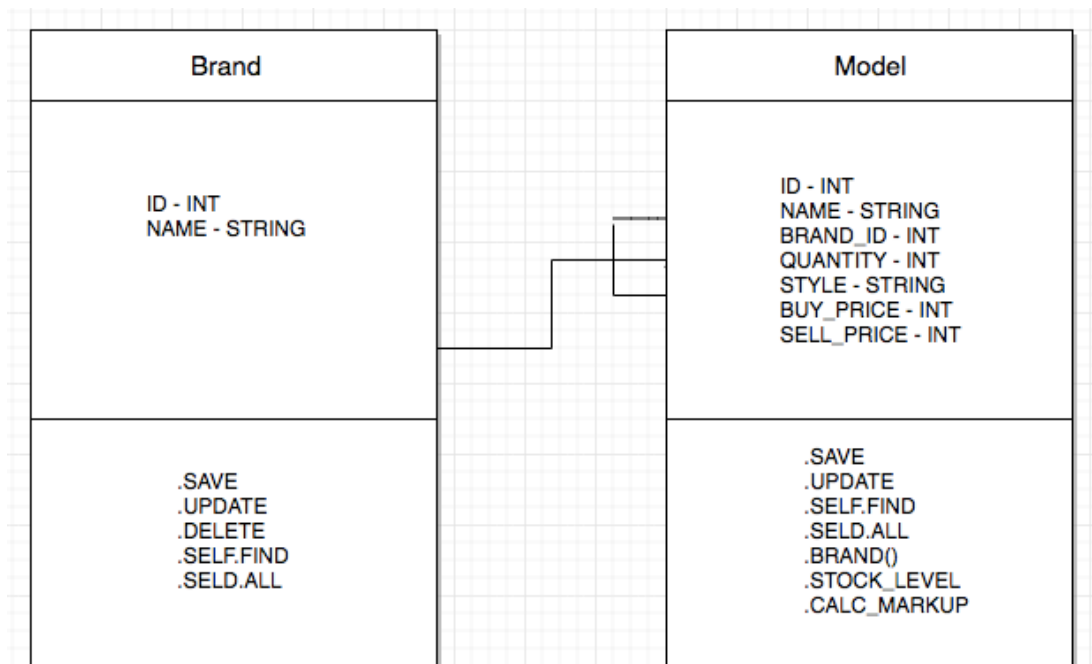
Fraser Brown: Cohort E17
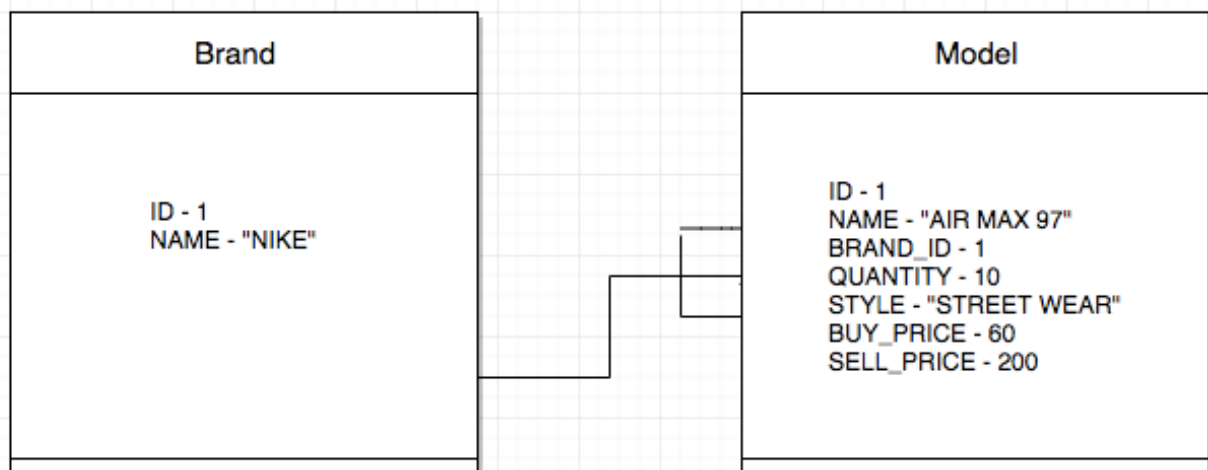
A.D.1 Use case Diagram

A.D.2 Class diagram

A.D.3 Object diagram

Brand	Model
ID - 1 NAME - "NIKE"	ID - 1 NAME - "AIR MAX 97" BRAND_ID - 1 QUANTITY - 10 STYLE - "STREET WEAR" BUY_PRICE - 60 SELL_PRICE - 200

A.D.4 Activity diagram

Click on "Add Brand" → Enter Brand Name and "Add New Brand" → View New Brand → click on "Add Model" → Select new brand from drop down. → Enter Model Name, Style, Quantity, Buy Price & Sell Price → Click "Add Model" → View new brand and model in stock.
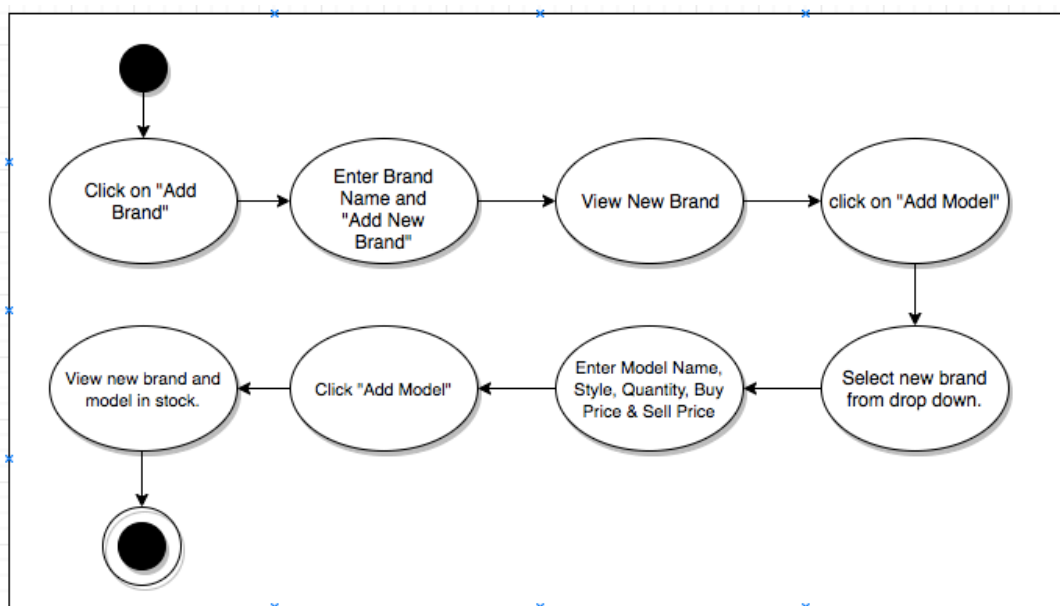
A.D.5 Inheritance diagram

```
                        ITEM

                 boughtPrice - double
                 sellPrice - double
                 - - - - - - - - - - - -
                 calculateMarkup()
                 getBoughtPrice()
                 setBoughtPrice()
                 getSellPrice()
                 setSellPrice()
```

```
       INSTRUMENT                      ACCESSORY

    family - familyType                name - string
    material - string
    - - - - - - - - - - -           - - - - - - - - -
    getFamilyType()
    getFamilyTypeName()                getName()
    getMaterial()
```

```
          VIOLIN                          CASE

    numberOfStrings - int            type - string
    boughtPrice - double             boughtPrice - double
    sellPrice - double               sellPrice - double
    material - "wood"                name - string
    familyType - string
    - - - - - - - - - - -           - - - - - - - - -
    getNumberOfStrings()
    play()                           getCaseType()
```

A.D.6 Implementations Constraints

	Constraint and possible effect	Solution
Hardware and software platforms	The app only displays correctly in the browser, which restricts mobile users from seeing content.	Use a responsive design and use correct CSS formatting.
Performance requirements	A poor WIFI connection will make the connection run slow, as the apps database is held remotely.	Using a local database in JSON object to speed up the data.
Persistent storage and transactions	HD Videos and Images were used and the app relies on them heavily.	Videos were changed to mov files and images to .svg to keep the size down.
Budgets	No budget used.	Project created while at CodeClan

| Time | Due to the short time frame of one week, some features were left out of the app. | Extensions were added after the presentation. |