Item Genie

Analysis software for item comparison

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See first, talk later

System demomstration

Inspiration

Rapidly changing game situations

Inspiration

Constant patching and updates

Inspiration

A thirst for strategy

Who will love our program?

- Serious gamers

Who will love our program?

- Beginners

Who will love our program?

And even game designers

Type of system

Non-real-time

Type of system

Client-server application

What it does

Compares across multiple attributes between multiple items

What it does

Informs users how much value they are getting for each gold

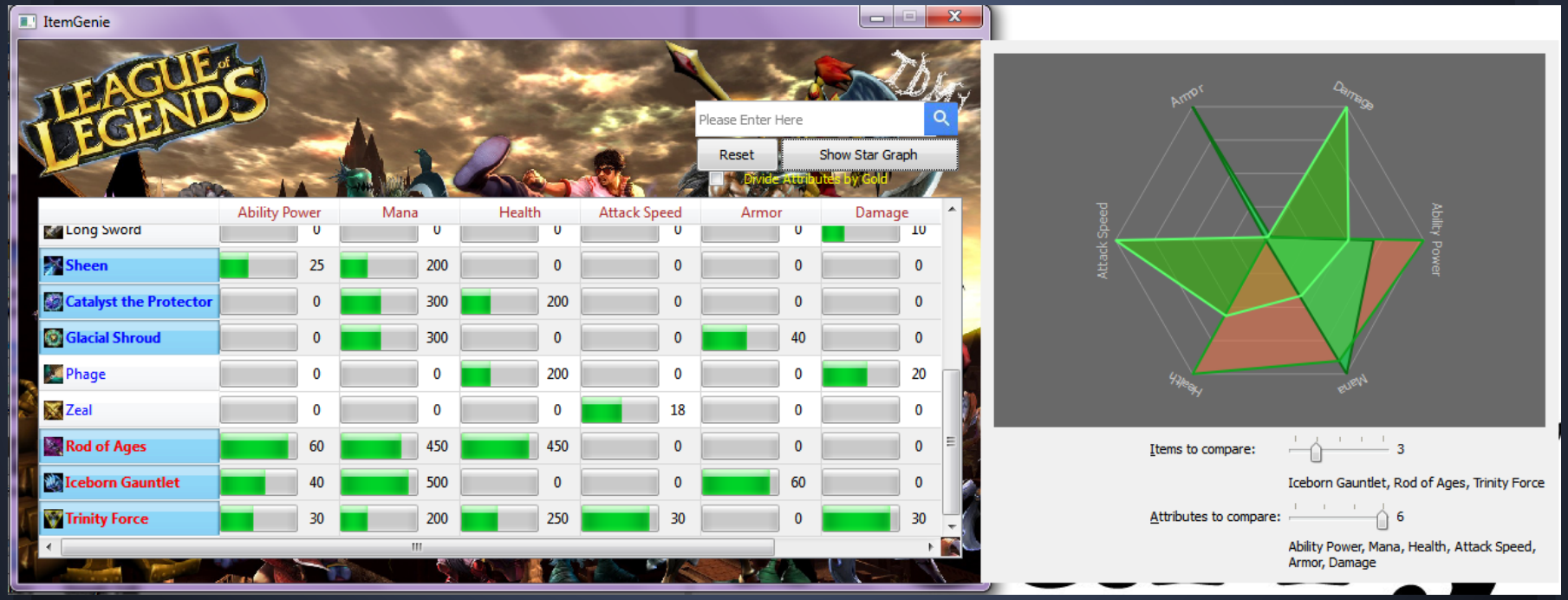
What it does

Sorts items according to how much bonus they give in each attribute

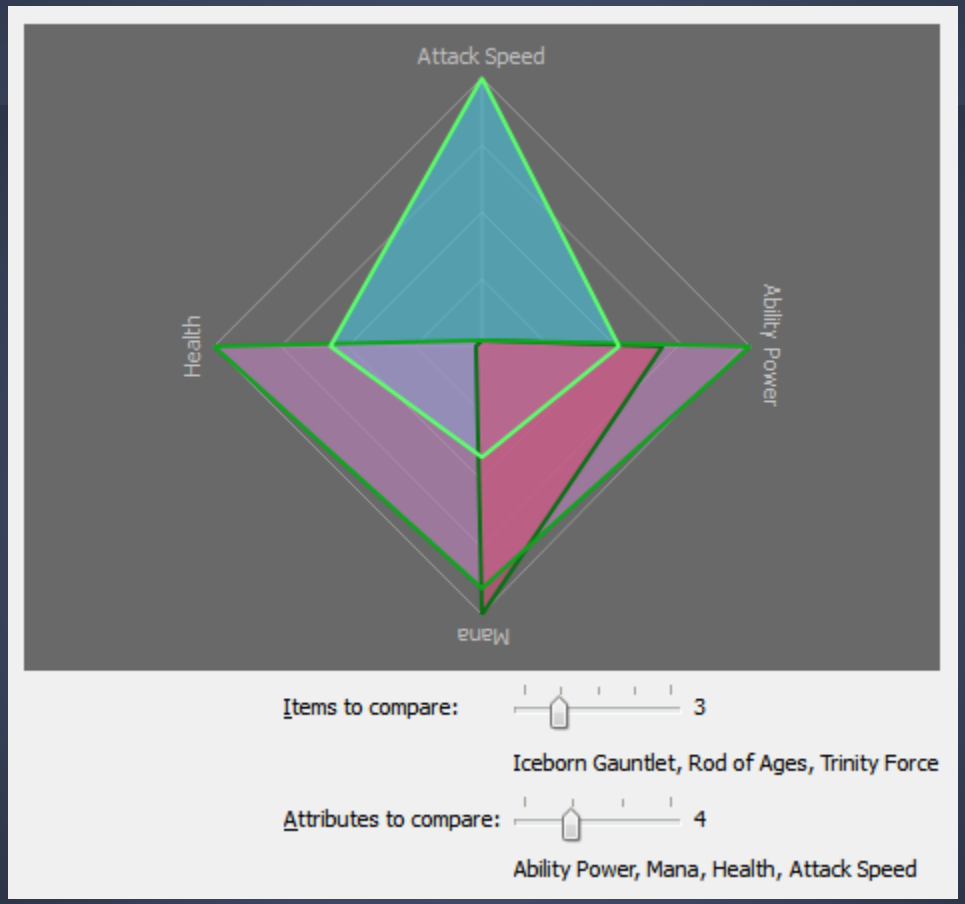
GUI design

Major functionalities

Selection of items and attributes for graphical comparison



Bar graph comparison



Star-graph comparison

Major functionalities

Priority sorting

	Ability Power	Attack Speed	Mana	Health	Armor	Damage
Blasting Wand	40	0	0	0	0	0
Amplifying Tome	20	0	0	0	0	0
Dragger	0	12	0	0	0	0
Brawler's Gloves	0	5	0	0	0	0
Sapphire Crystal	0	0	200	0	0	0
Ruby Crystal	0	0	0	150	0	0
Chain Vest	0	0	0	0	40	0
Long Sword	0	0	0	0	0	10

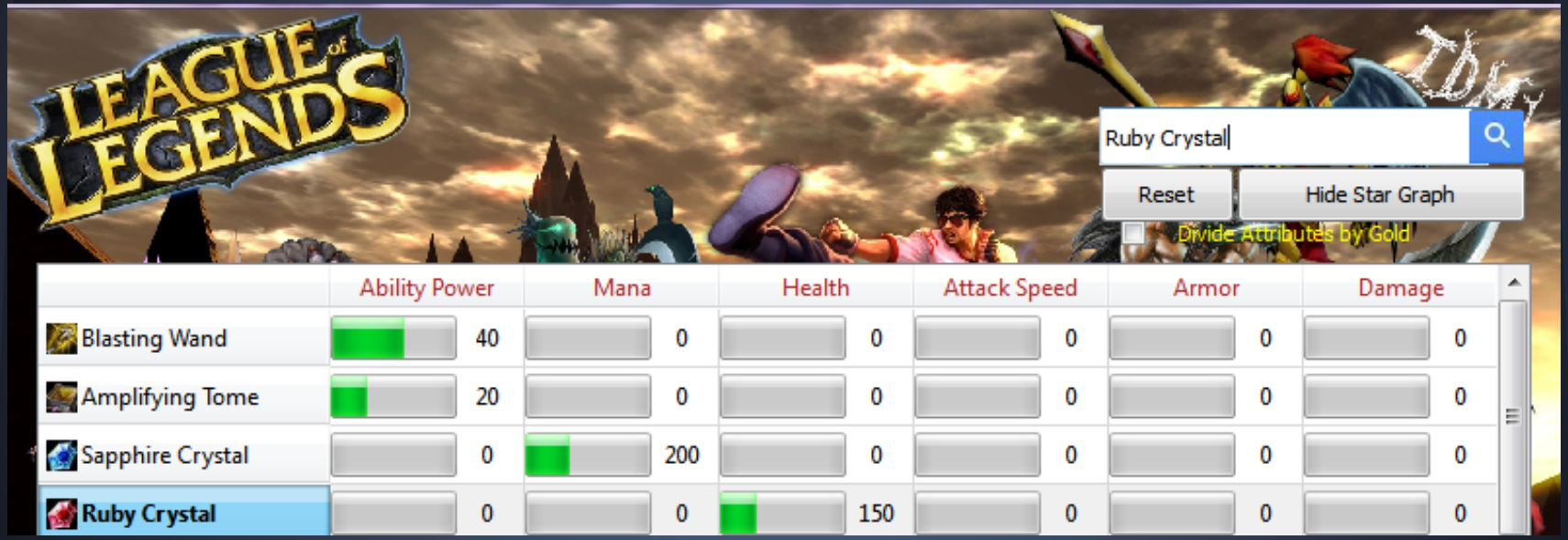
Major functionalities

Grouping by tier and comparing within the tier

	Damage	Ability Power	Attack Speed	Mana	Health	Armor
Chain Vest	0	0	0	0	0	40
Phage	20	0	0	0	200	0
Sheen	0	25	0	200	0	0
Zeal	0	0	18	0	0	0
Catalyst the Protector	0	0	0	300	200	0
Glacial Shroud	0	0	0	300	0	40
Trinity Force	30	30	30	200	250	0
Rod of Ages	0	60	0	450	450	0
Iceborn Gauntlet	0	40	0	500	0	60

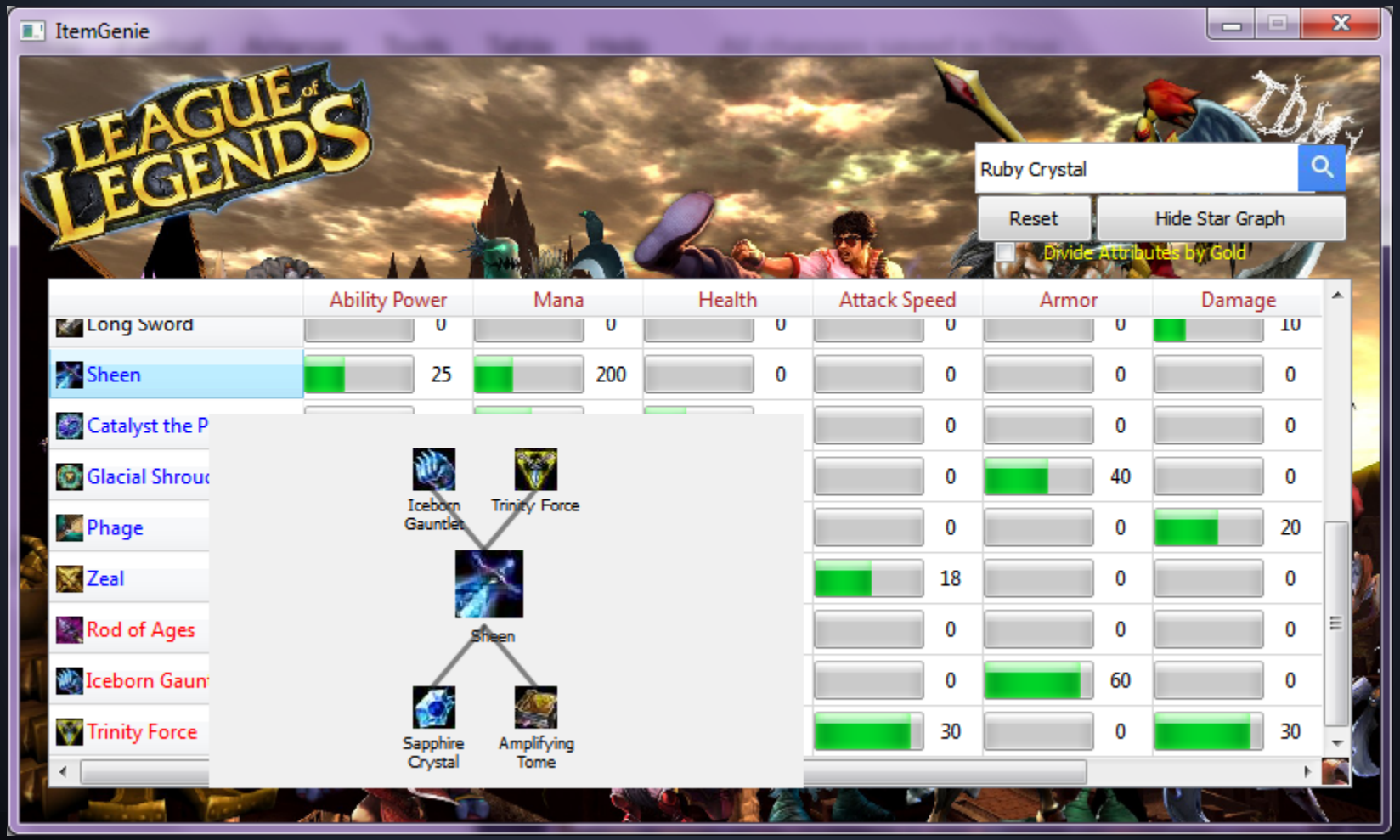
Major functionalities

Searching to select items and attributes



Major functionalities

Item build: build to and built from



Design principles

- User in control
  - Allowing users to select items and attributes for comparison

Design principles

- See-and-point
  - Selection of items and attributes with a click

Design principles

- Dynamic updating
  - Star graph is updated automatically when items are selected

Design principles

- Metaphors
  - Item build represents the pyramid build of items

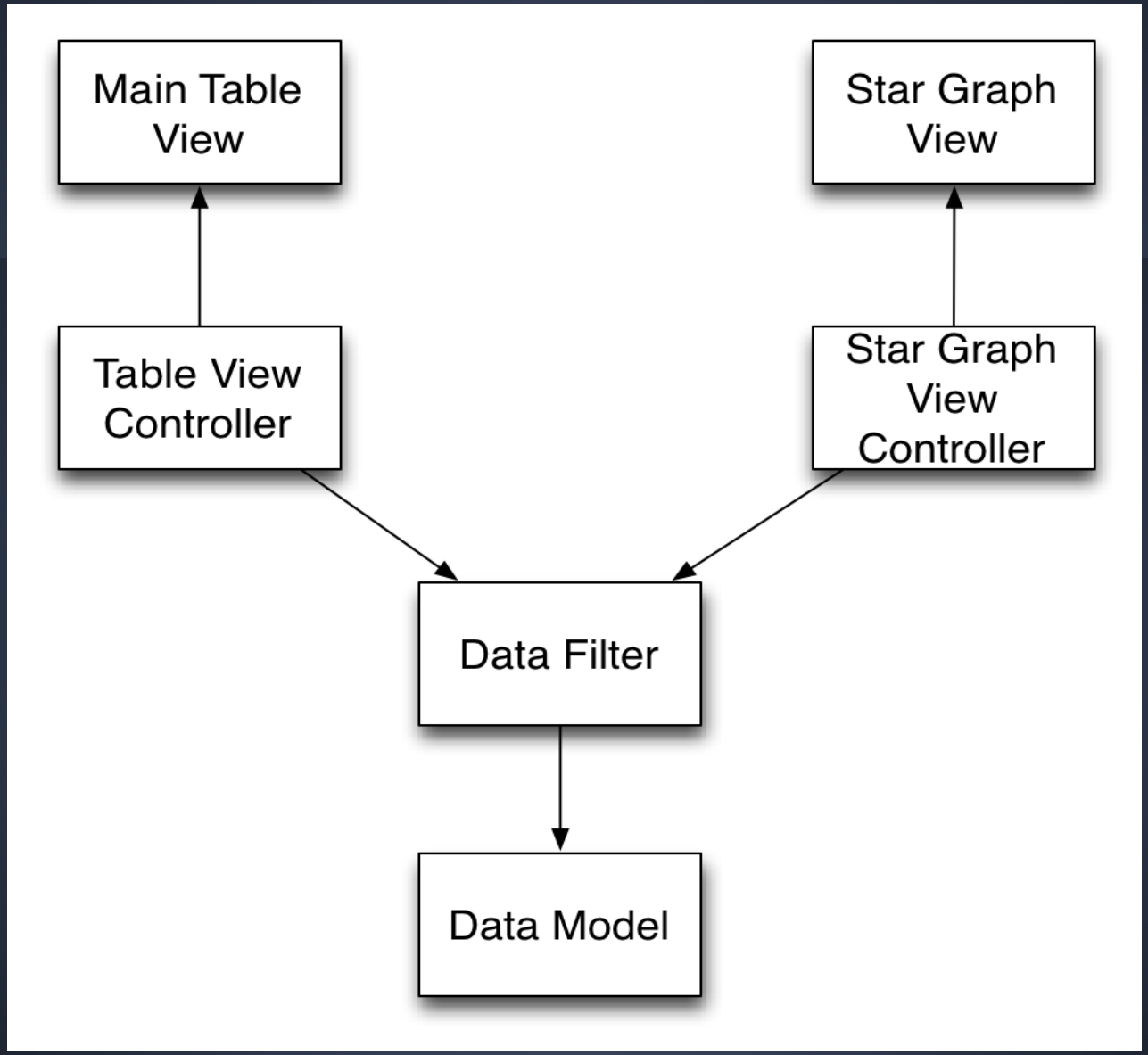
Design principles

- Colour coding
  - Different colours to represent different tiers and items

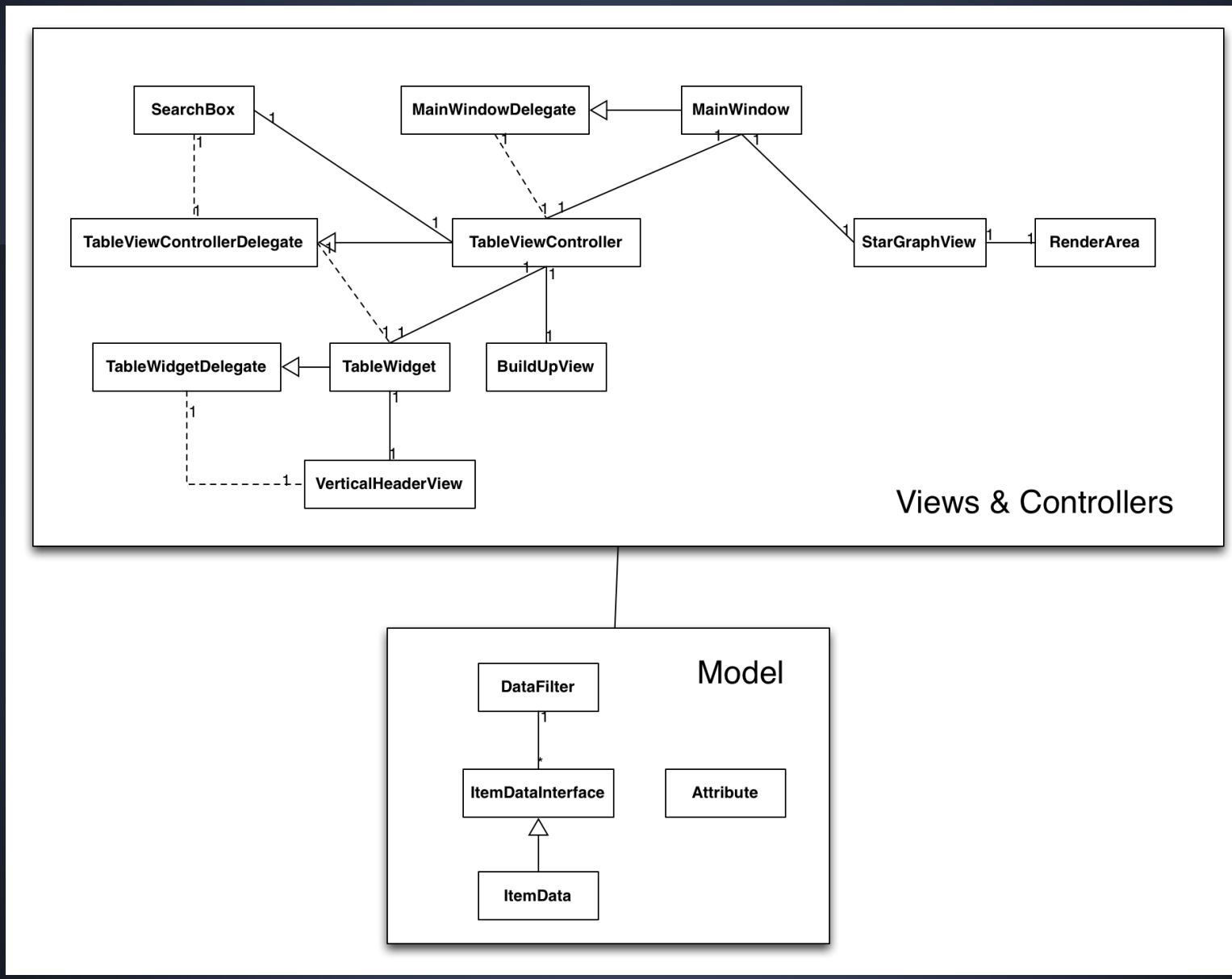
Design principles

- Usability
  - Search box automatically on focus when program starts
  - Mouse-over shows item attributes and build

System Architecture

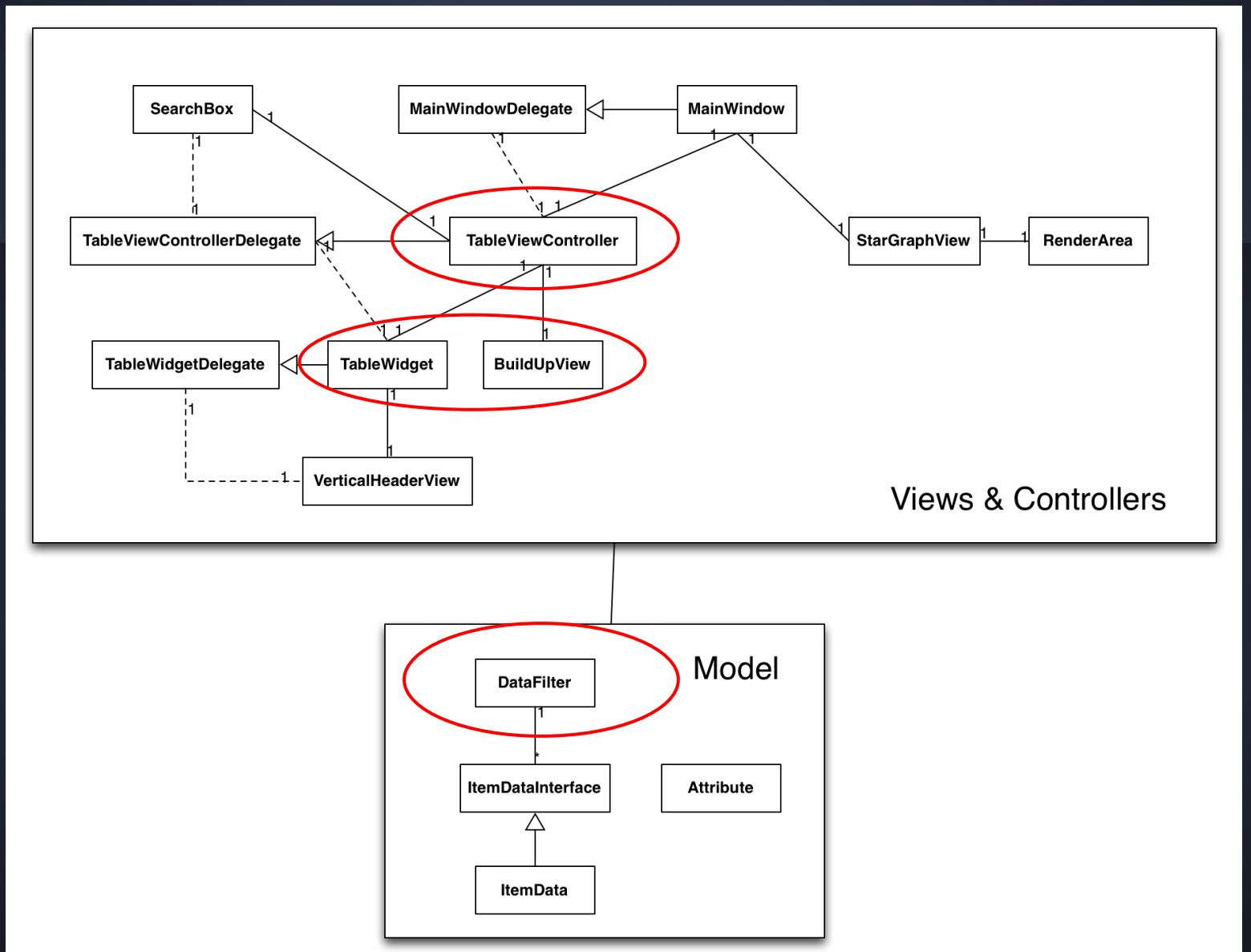


Architecture Diagram (Logically)

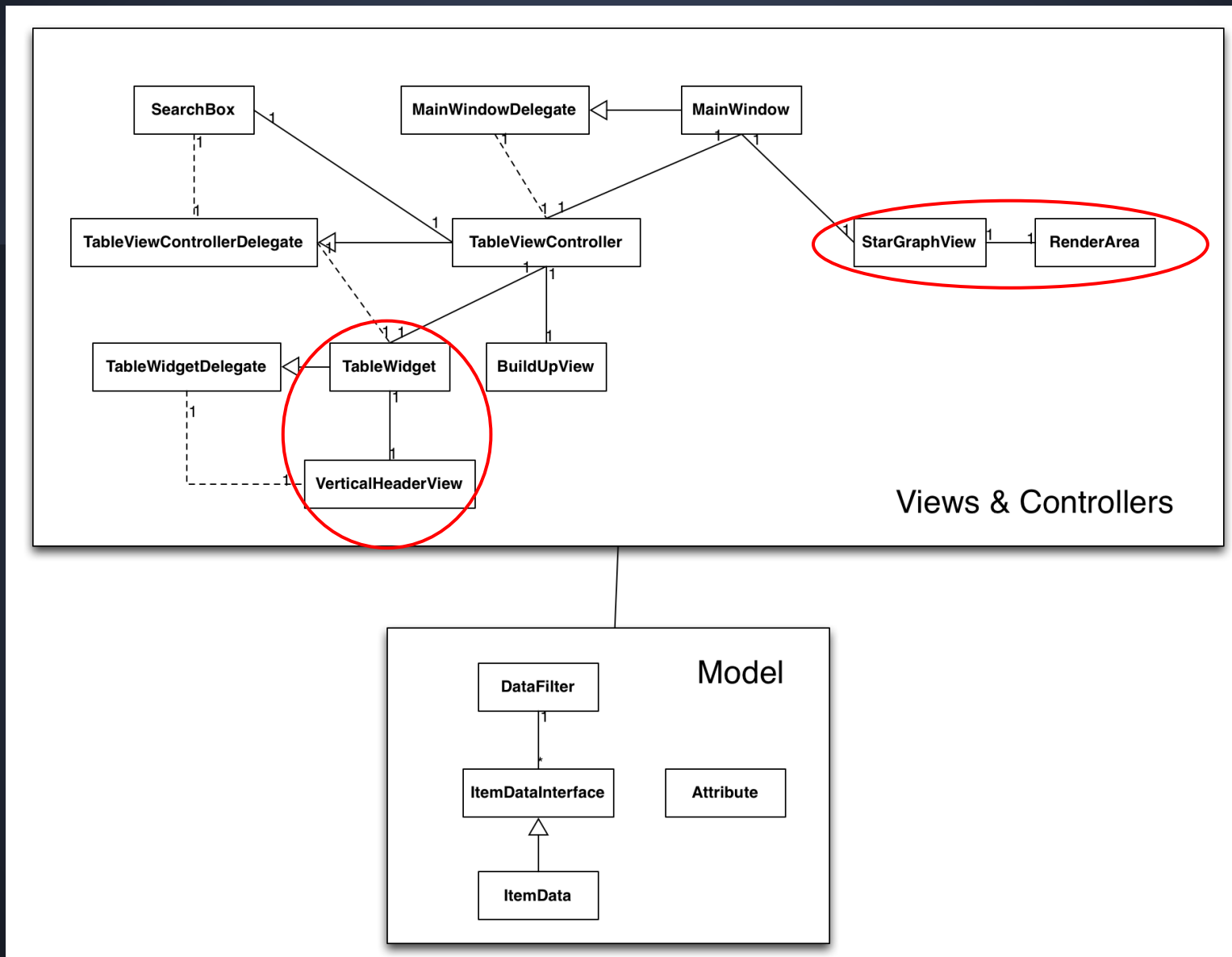


Architecture Diagram (Detailed)

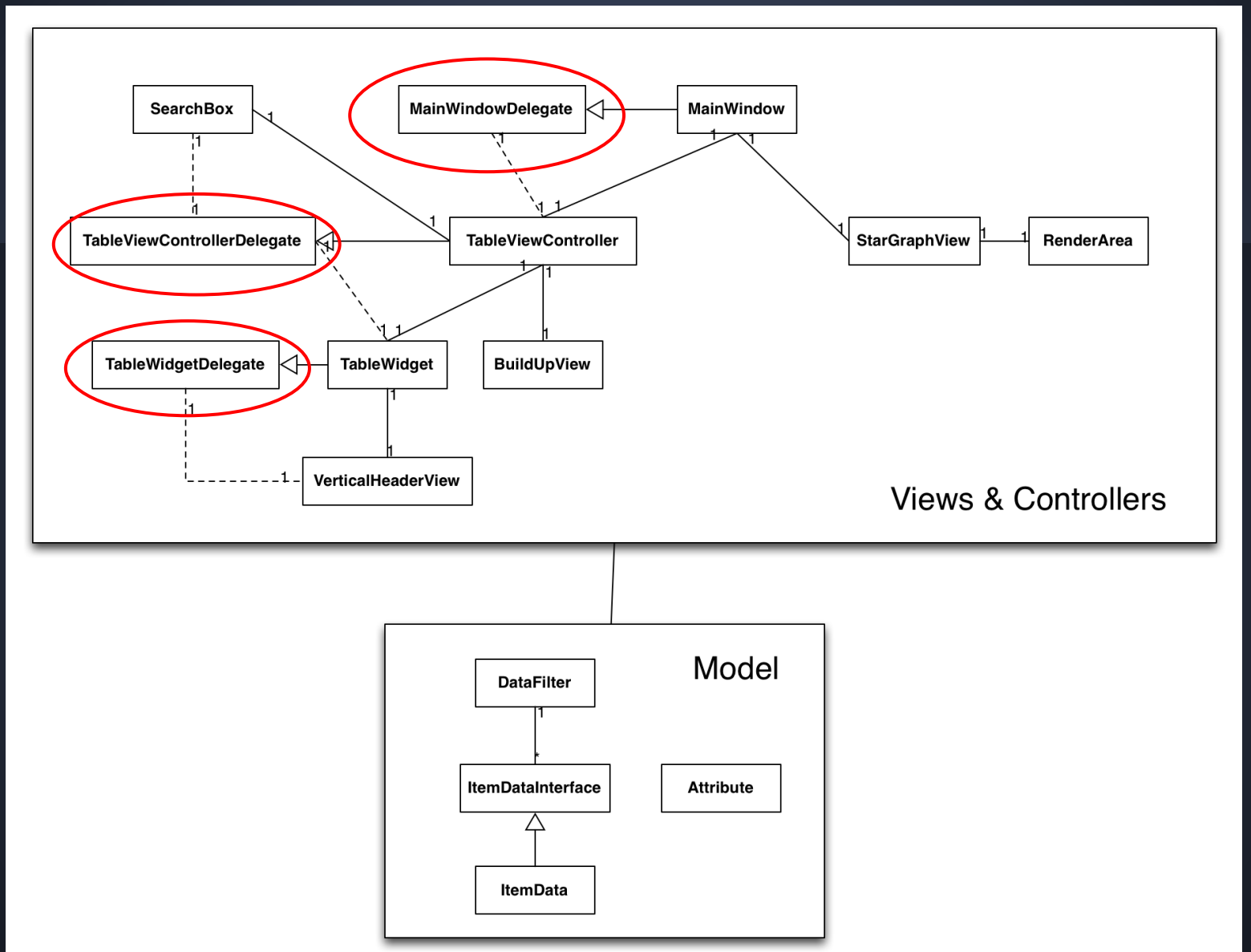
Design Pattern



Model View Controller



Separation of Concern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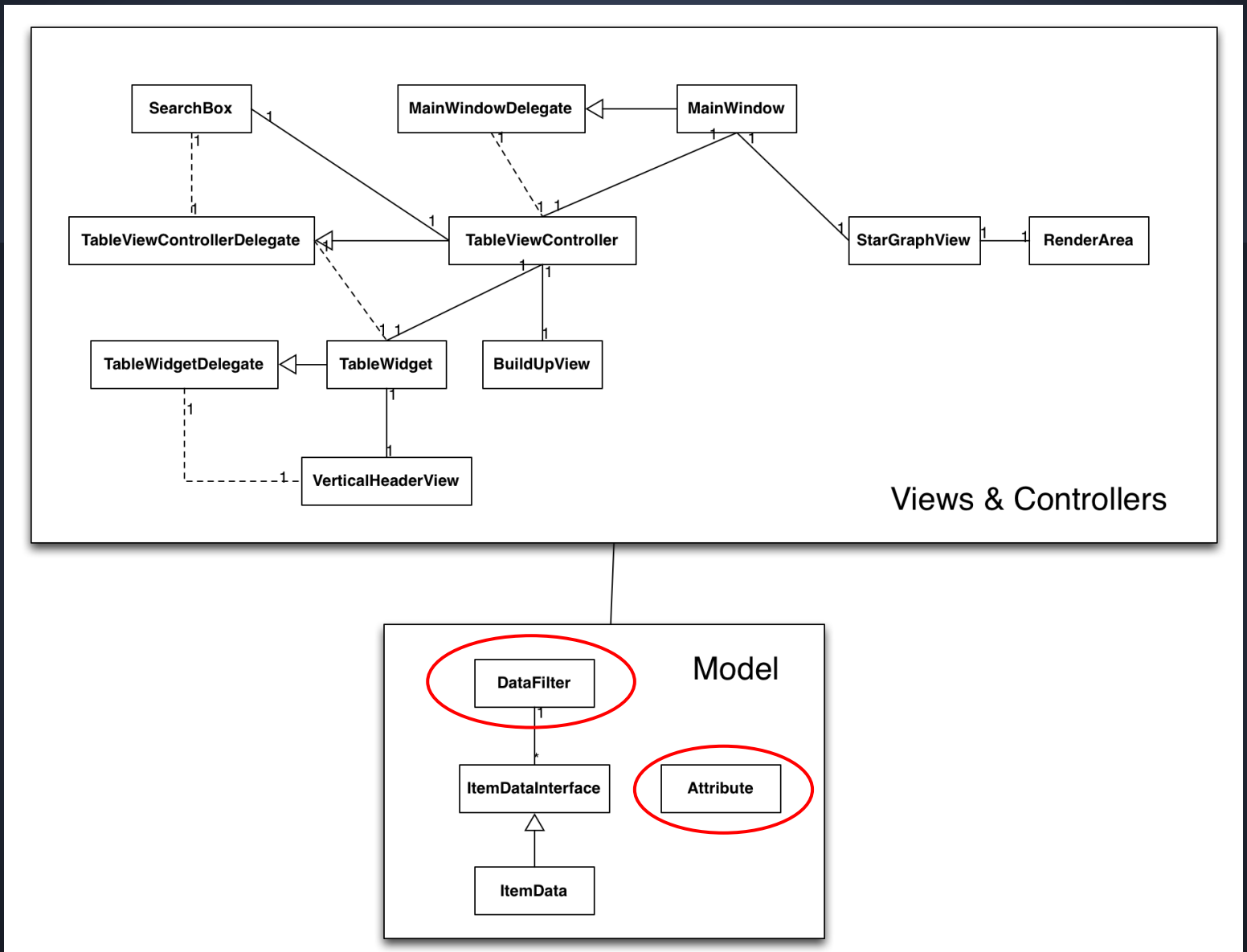
TableViewControllerDelegate
TableViewController
StarGraphView
RenderArea
TableWidgetDelegate
TableWidget
BuildUpView
VerticalHeaderView
Views & Controllers
Model
DataFilter
ItemDataInterface
Attribute
ItemData

Delegate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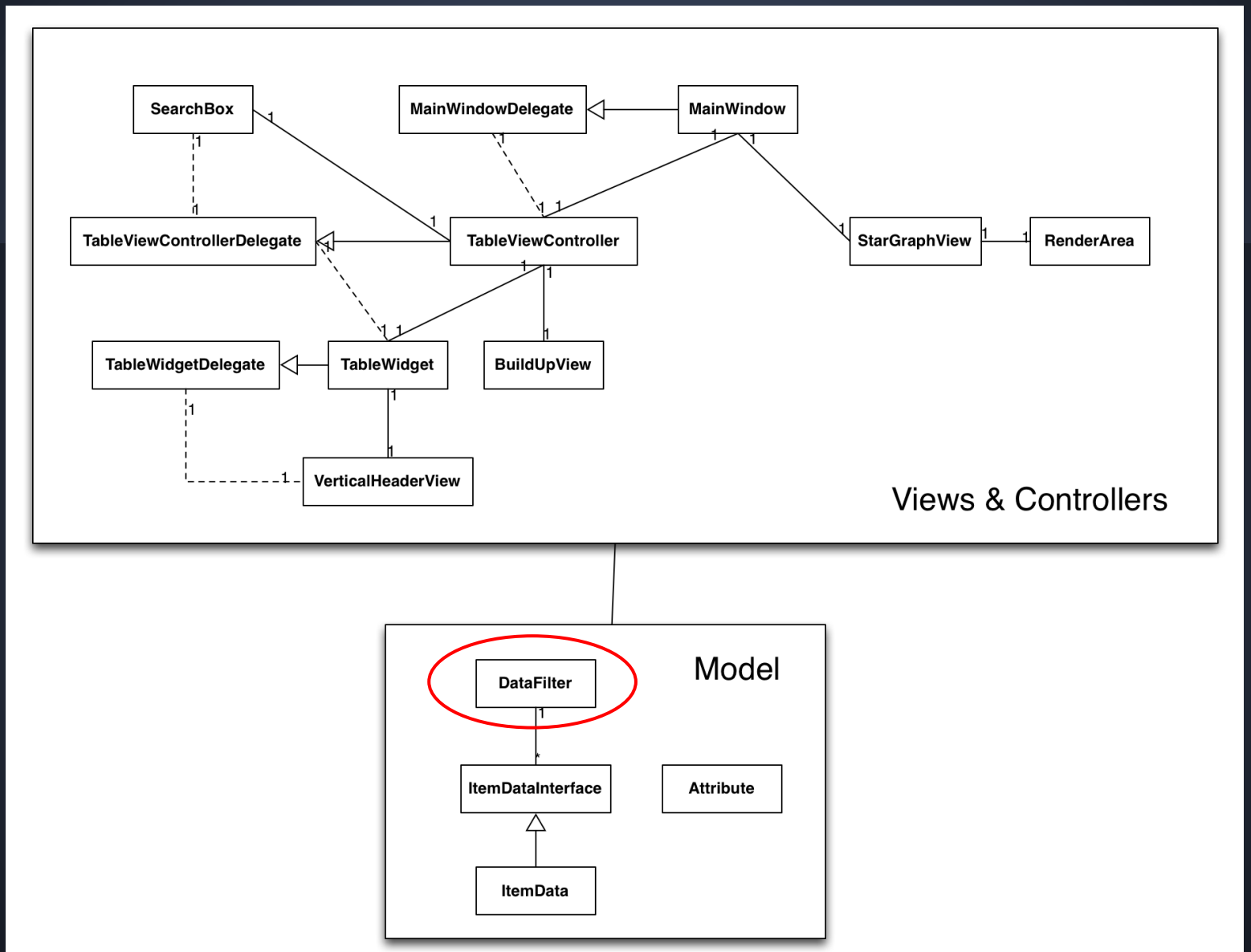
Singleton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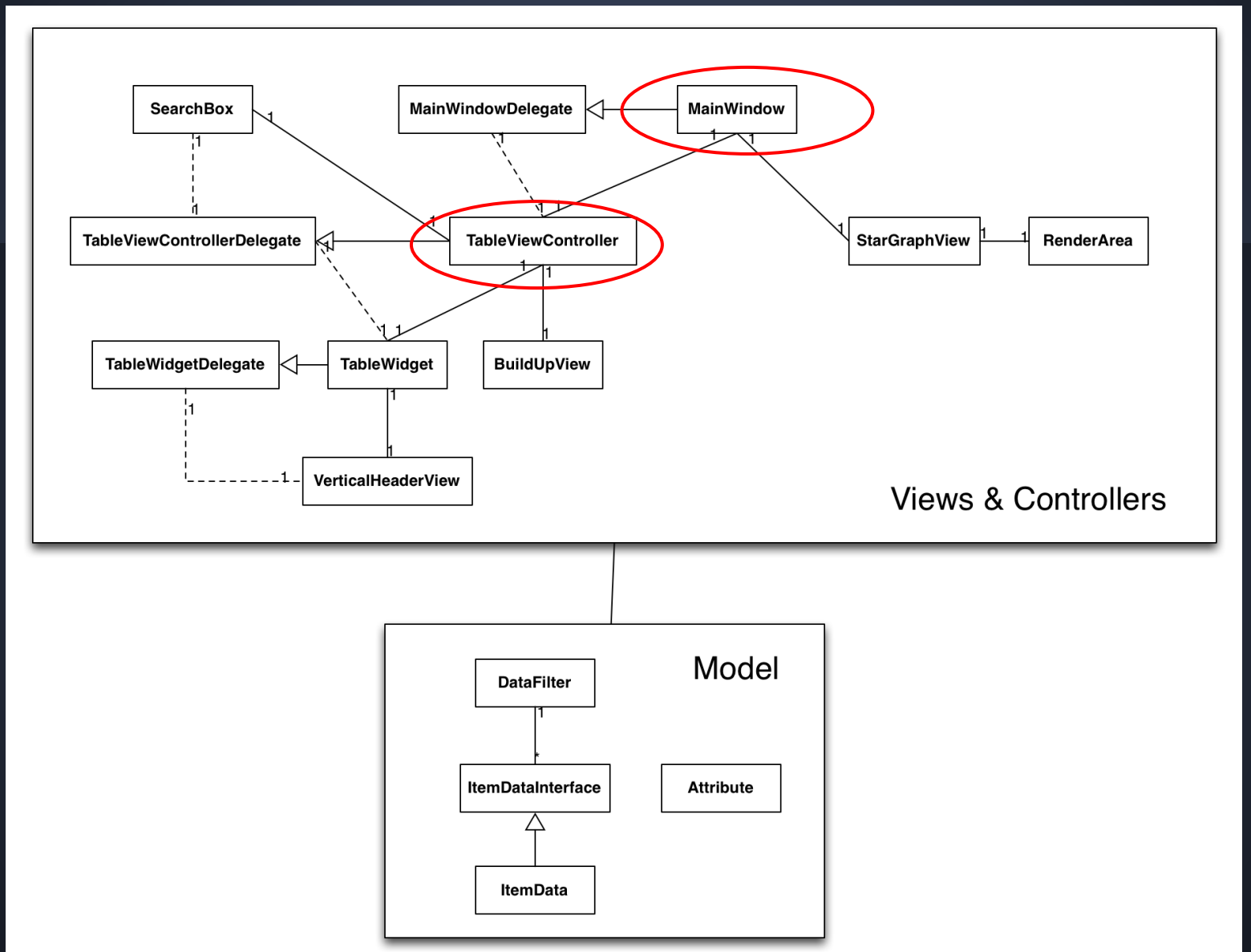
Facade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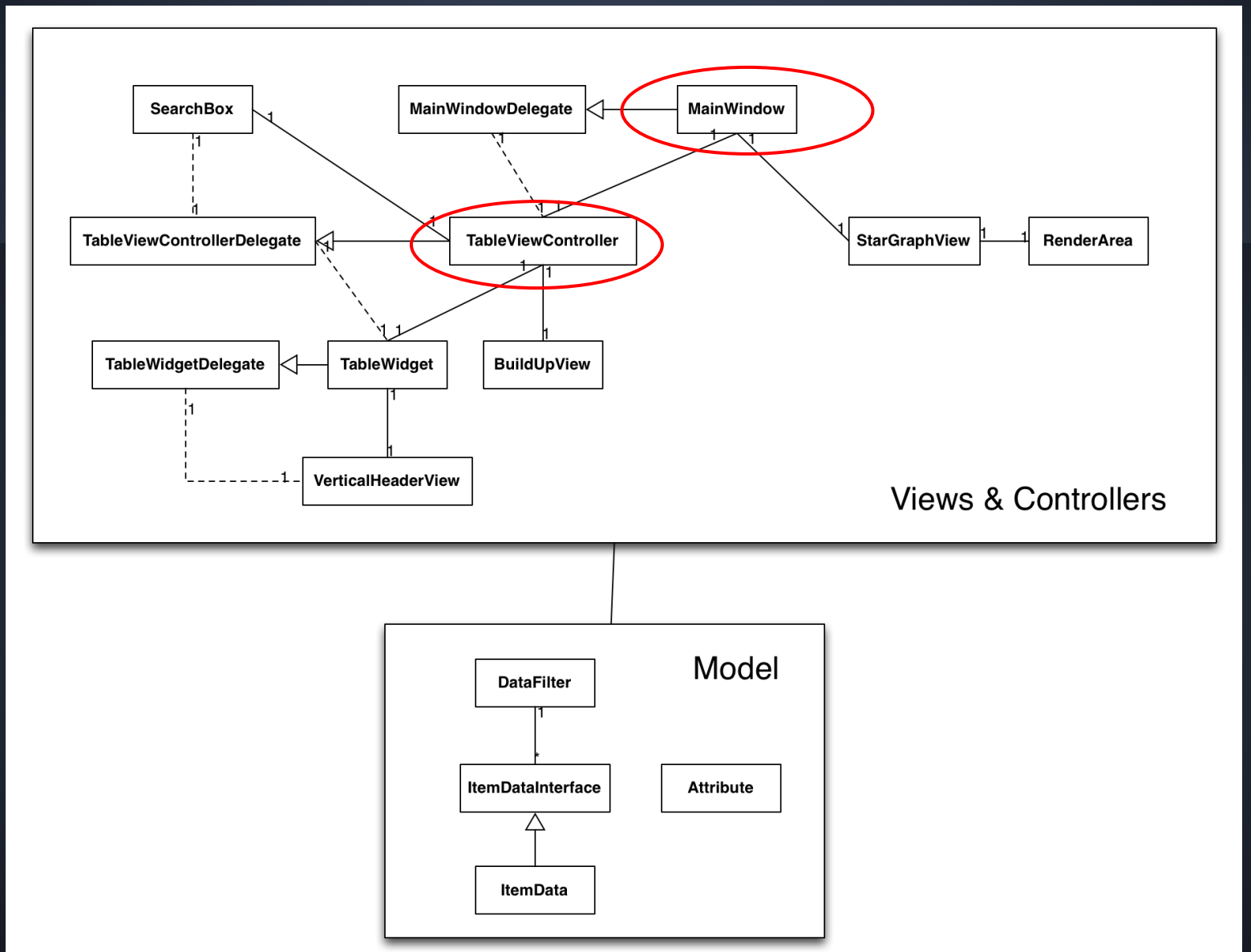
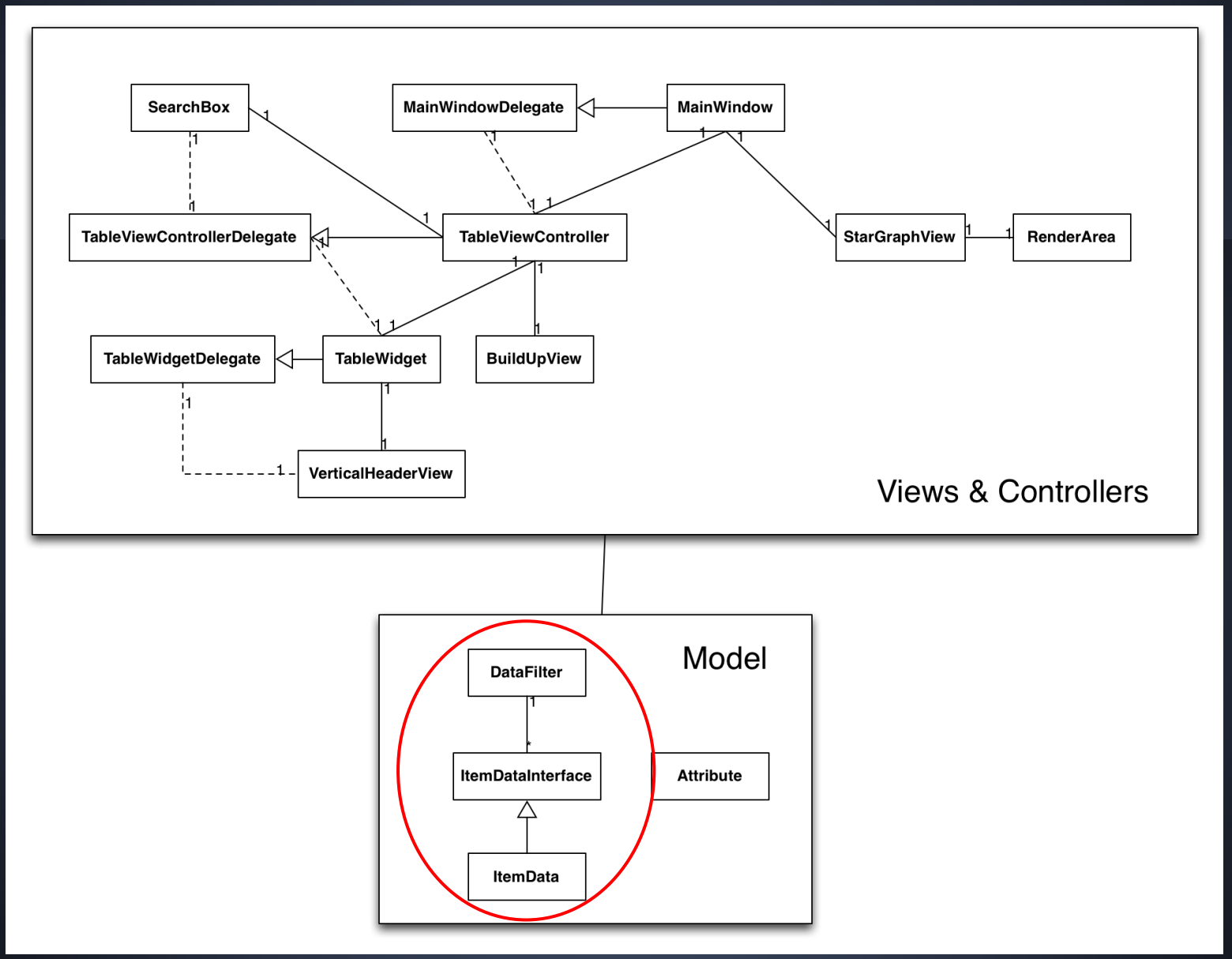
Observer



Chain of Responsibility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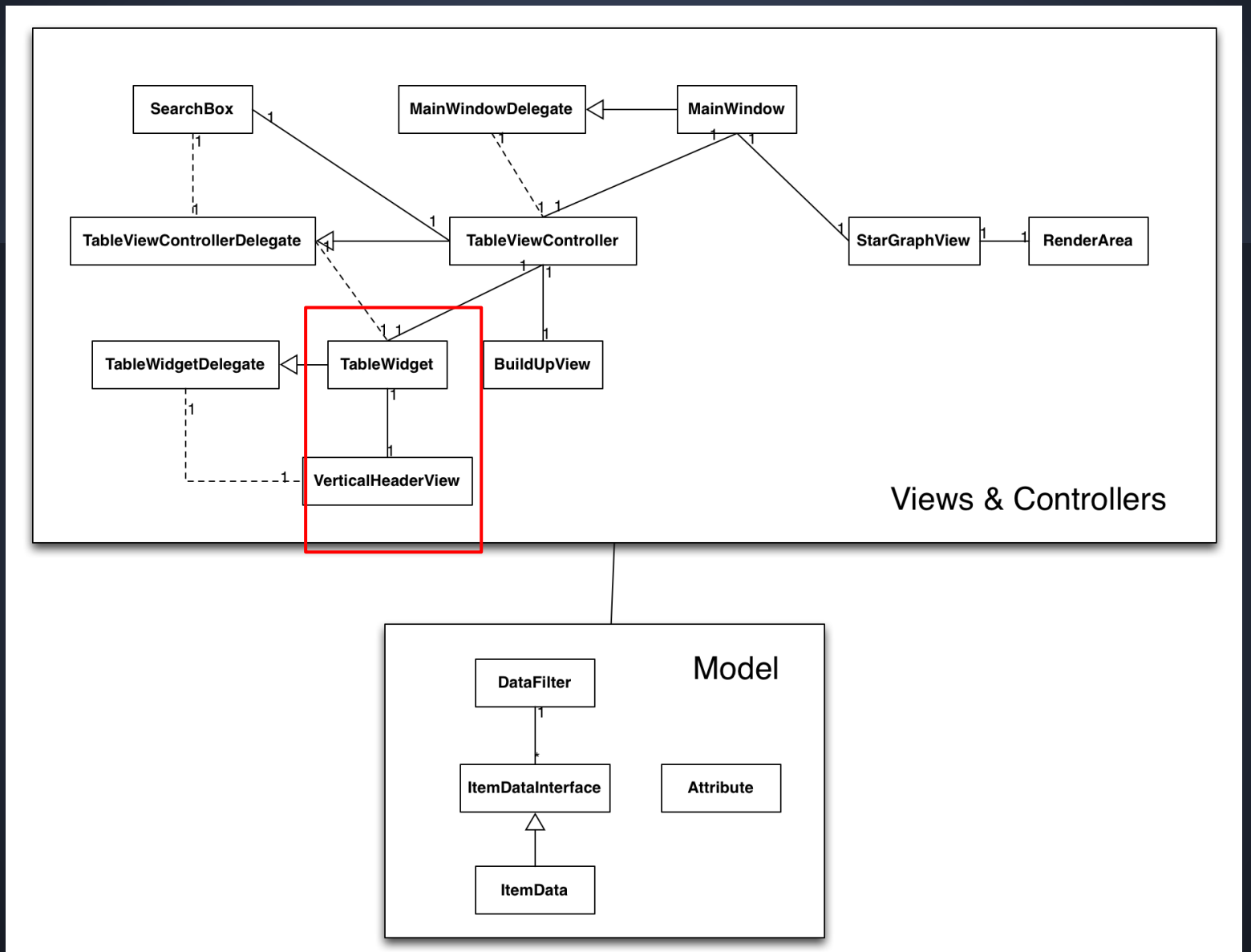
Factory

Implementation Issues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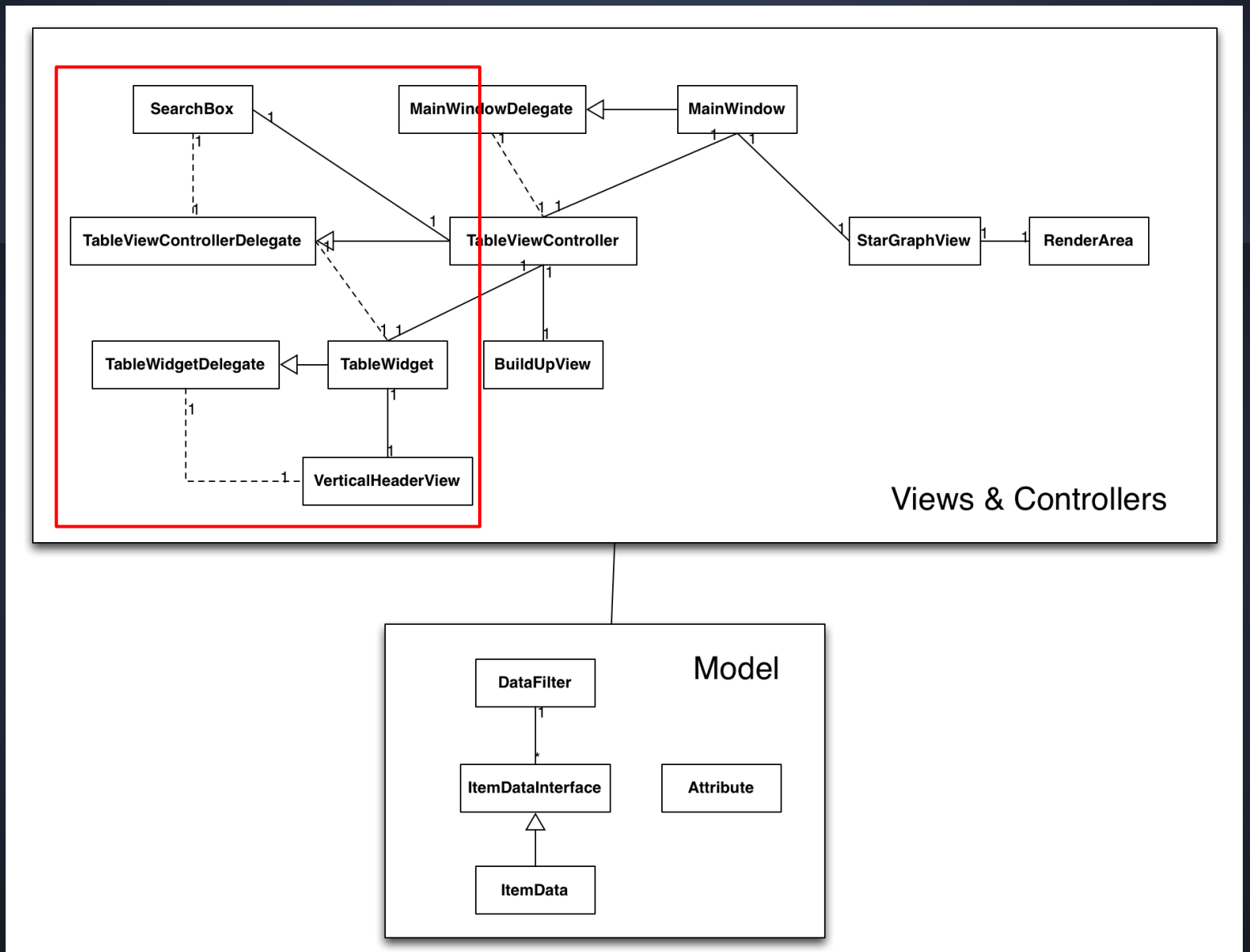
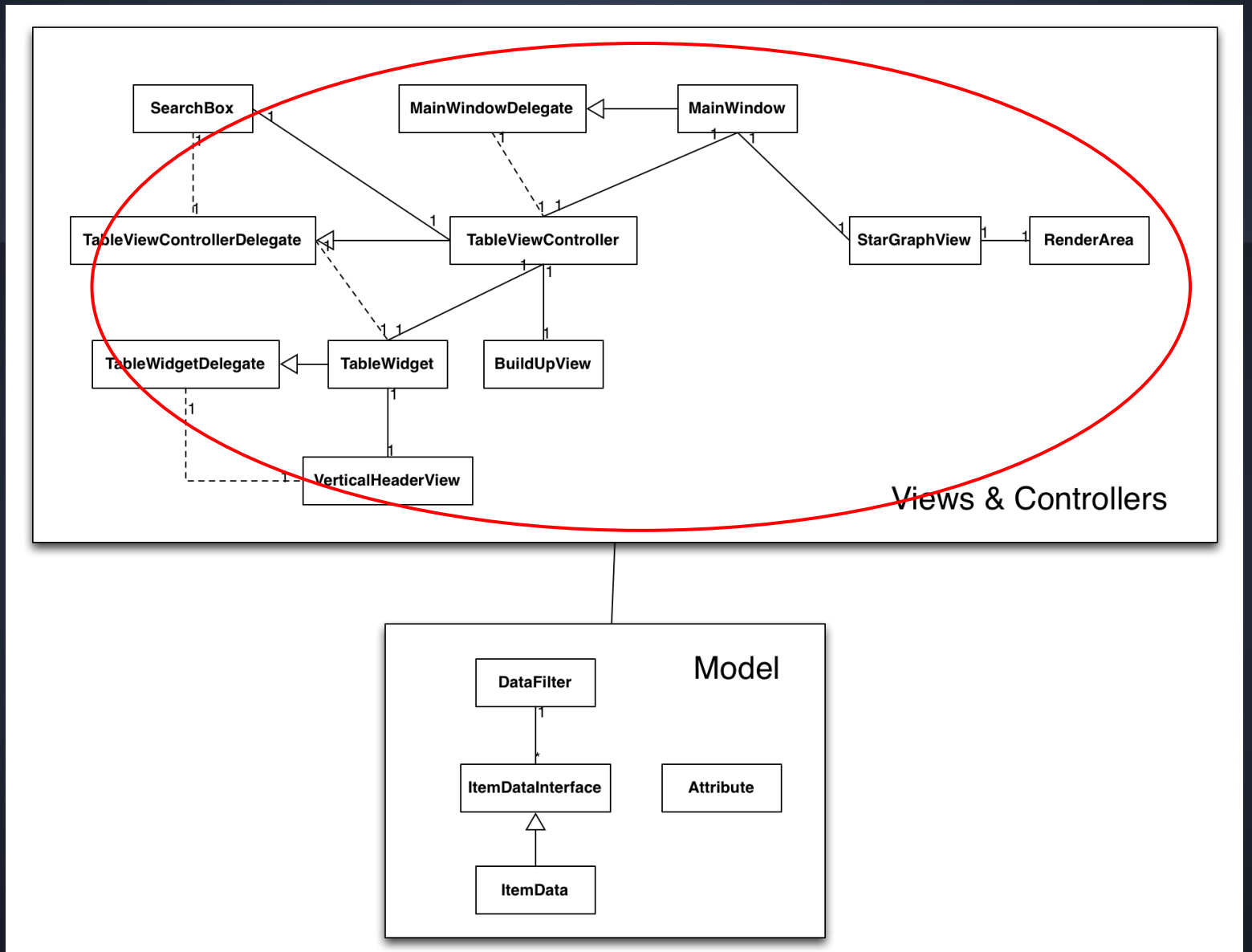
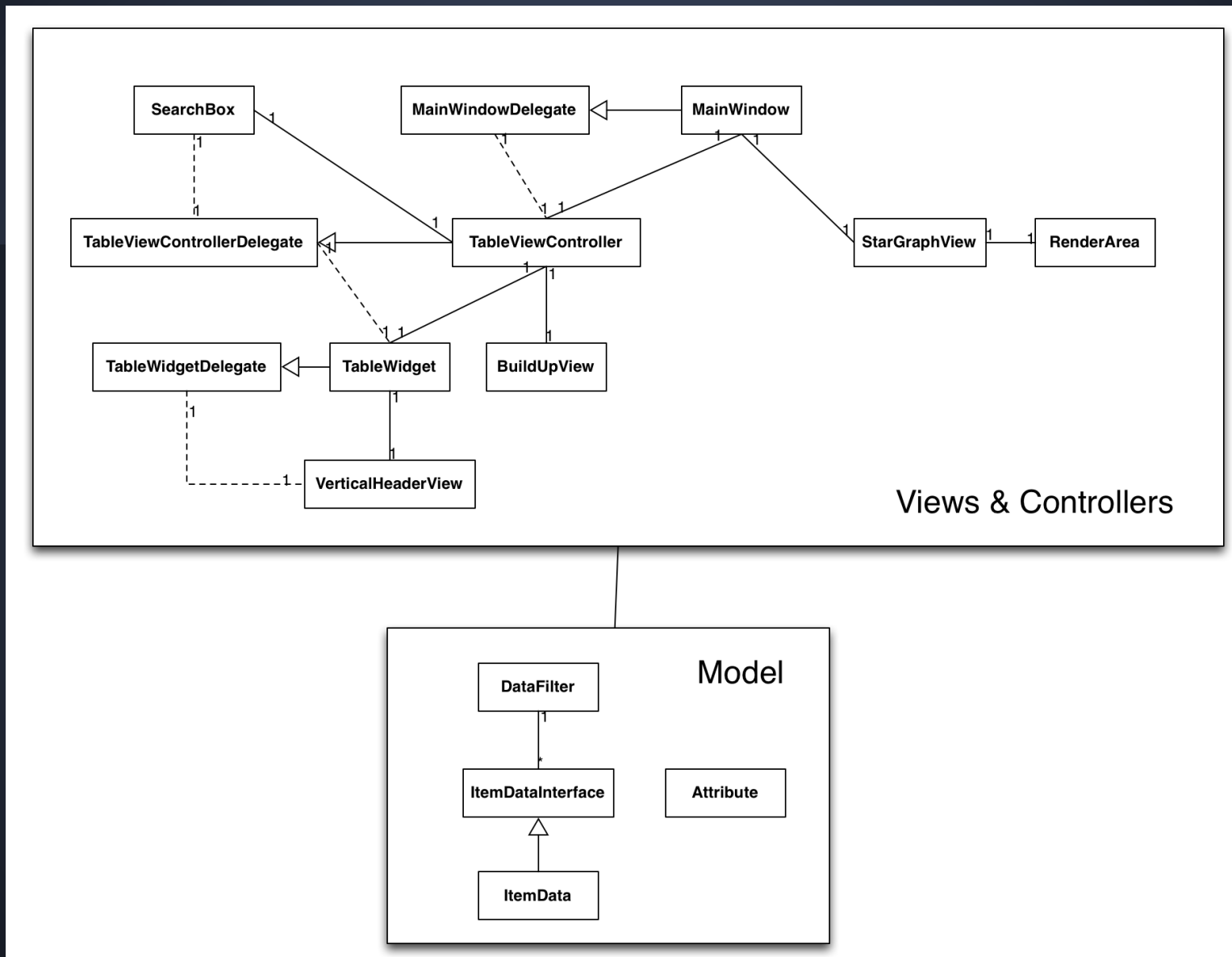
Mouse over



Frequently Updating Table



Too much overhead



Cannot pull data from server

Q&A