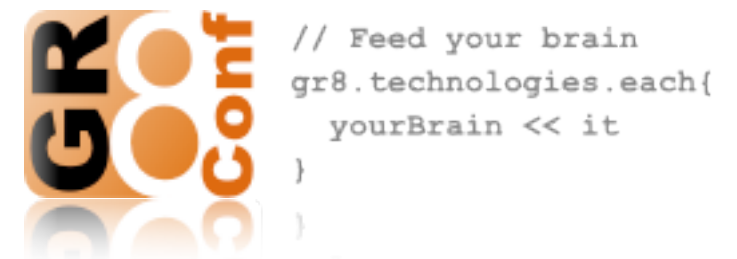


# Building modular applications with Plugins

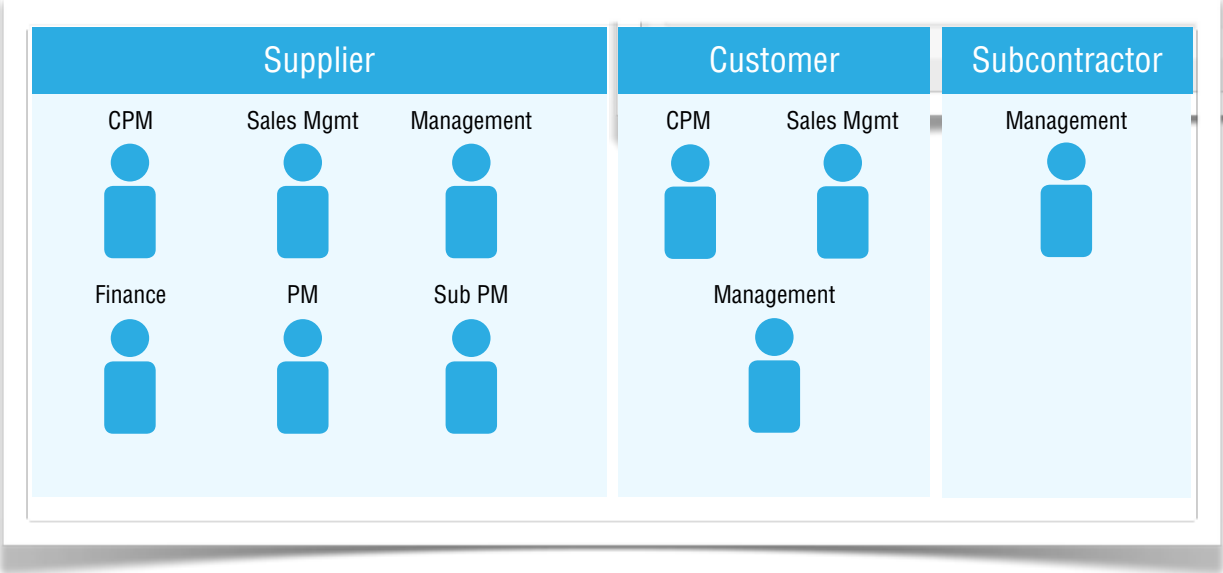
GR8Conf US 2012

Andreas Arledal



# Me

- ✚ CTO at FindOut Technologies - Sweden
- ✚ Groovy and Grails since 2008
- ✚ Non Java background
- ✚ @AndreasArledal



▲▲▲ = Commercial status

●●● = Operational status

Welcome, you're logged in as andreas.orl@ind-out.se.  
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[Dashboard](#) [Customers](#) [User admin](#)

Customers -> Cellcom -> Project - RBS Phase 3 (Malaysia)

Project Info

Activities

Contacts

To bill (5)

Invoice specifications

Gantt chart

Create invoice specification

Search:

ID	Customer	Contract	Delivery item	Achieved date	Issued by	Add
1151	Cellcom -Malaysia	Frame 2011	RBS1 copy 12 - Delivery	2011-10-31	Pass Assarsson	<input type="checkbox"/>
1693	Cellcom -Malaysia	Frame 2011	RBS copy 10 - Detailed Design	2011-11-28	Pass Assarsson	<input type="checkbox"/>
4414	Cellcom -Malaysia	Frame 2011	Feeder run 20 copy 3 - Downpayment	2011-10-31	Pass Assarsson	<input type="checkbox"/>
4417	Cellcom -Malaysia	Frame 2011	Feeder run 20 copy 4 - Downpayment	2011-10-31	Pass Assarsson	<input type="checkbox"/>
4420	Cellcom -Malaysia	Frame 2011	Feeder run 20 copy 5 - Downpayment	2011-10-31	Pass Assarsson	<input type="checkbox"/>

Create invoice specification

Project structure

RBS Phase 3 (58) [Create subproject](#)

Project files

DEmo (2011-10-31)

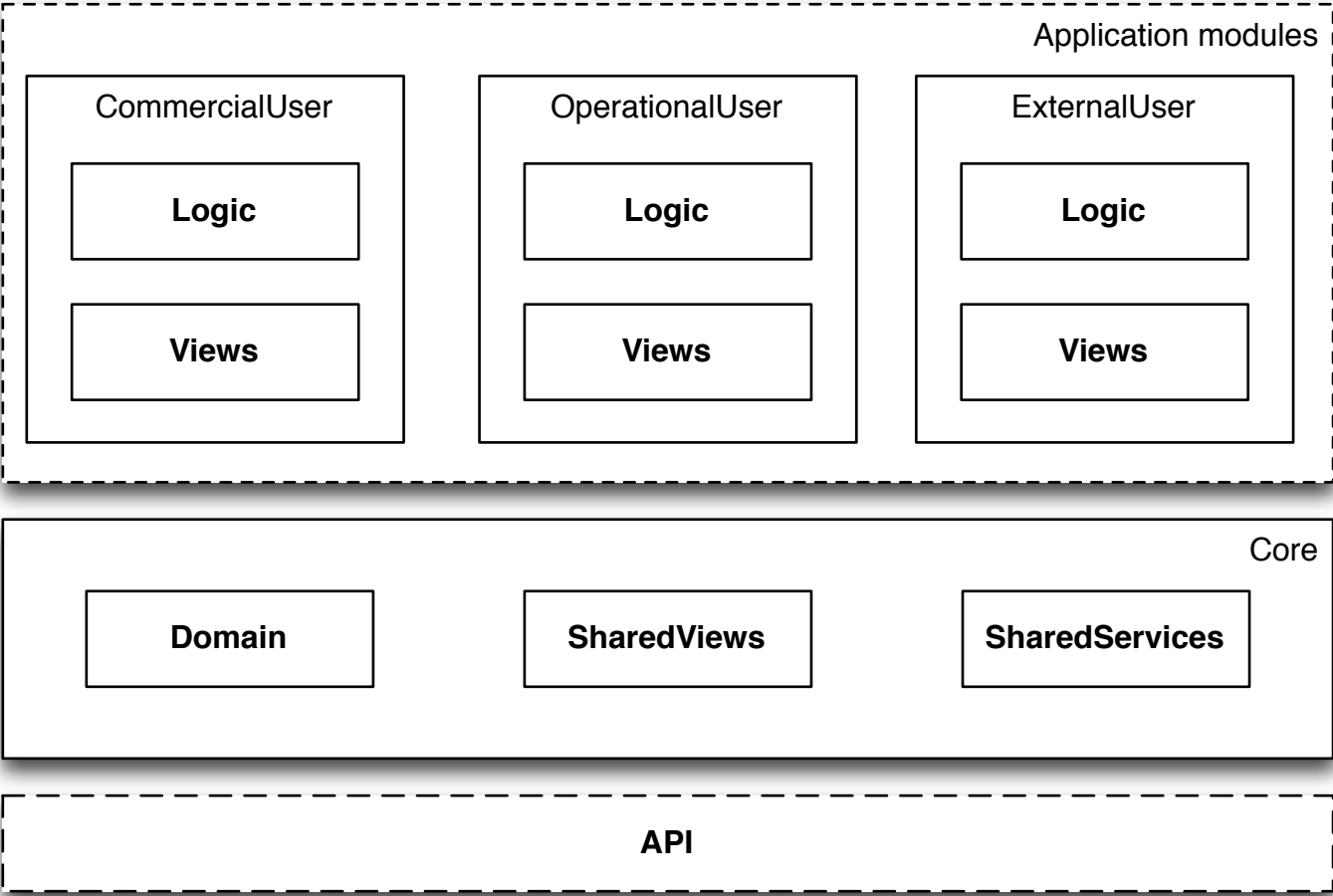
DEmo File (2011-10-28)

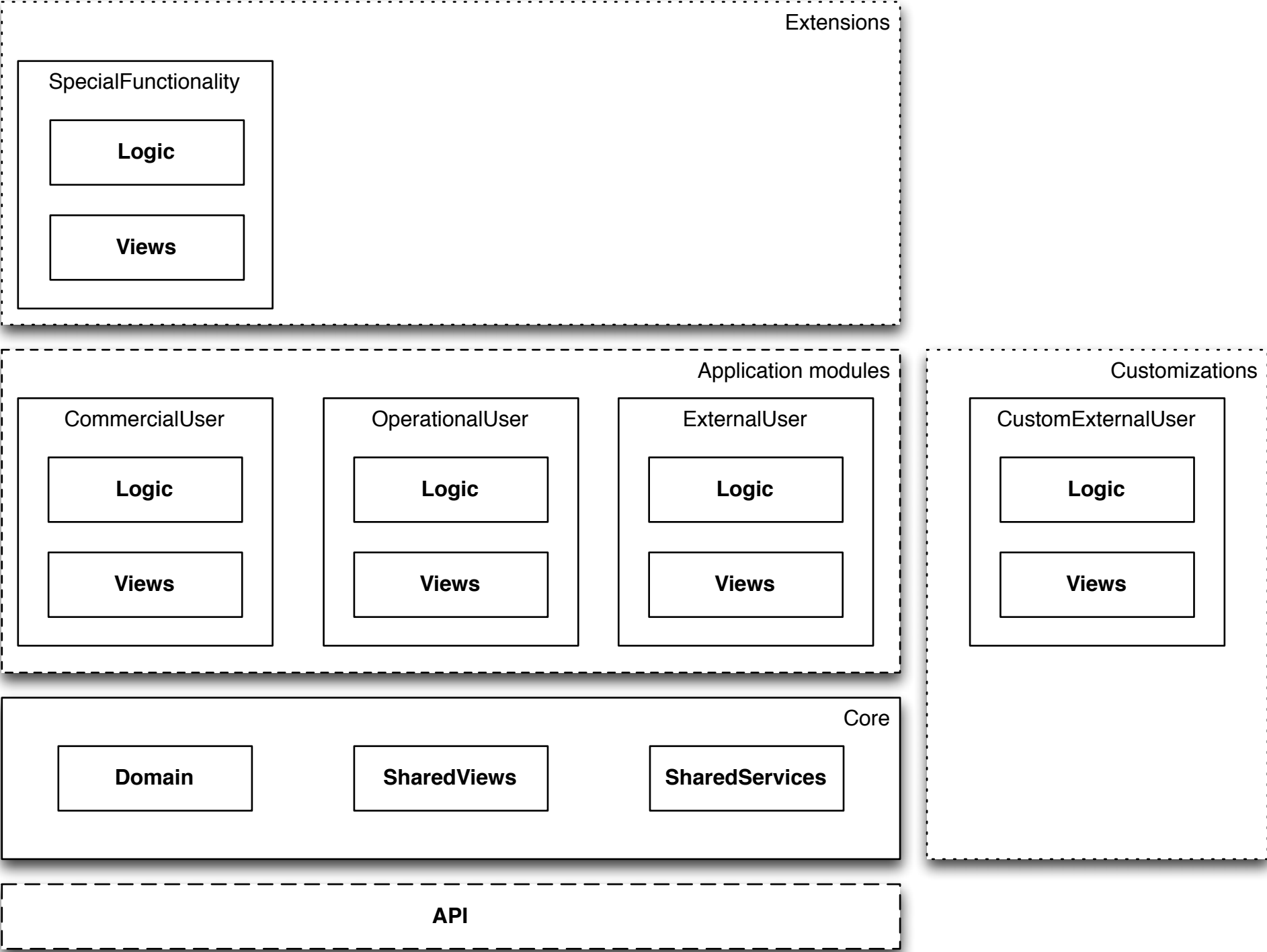
[Upload new file](#)

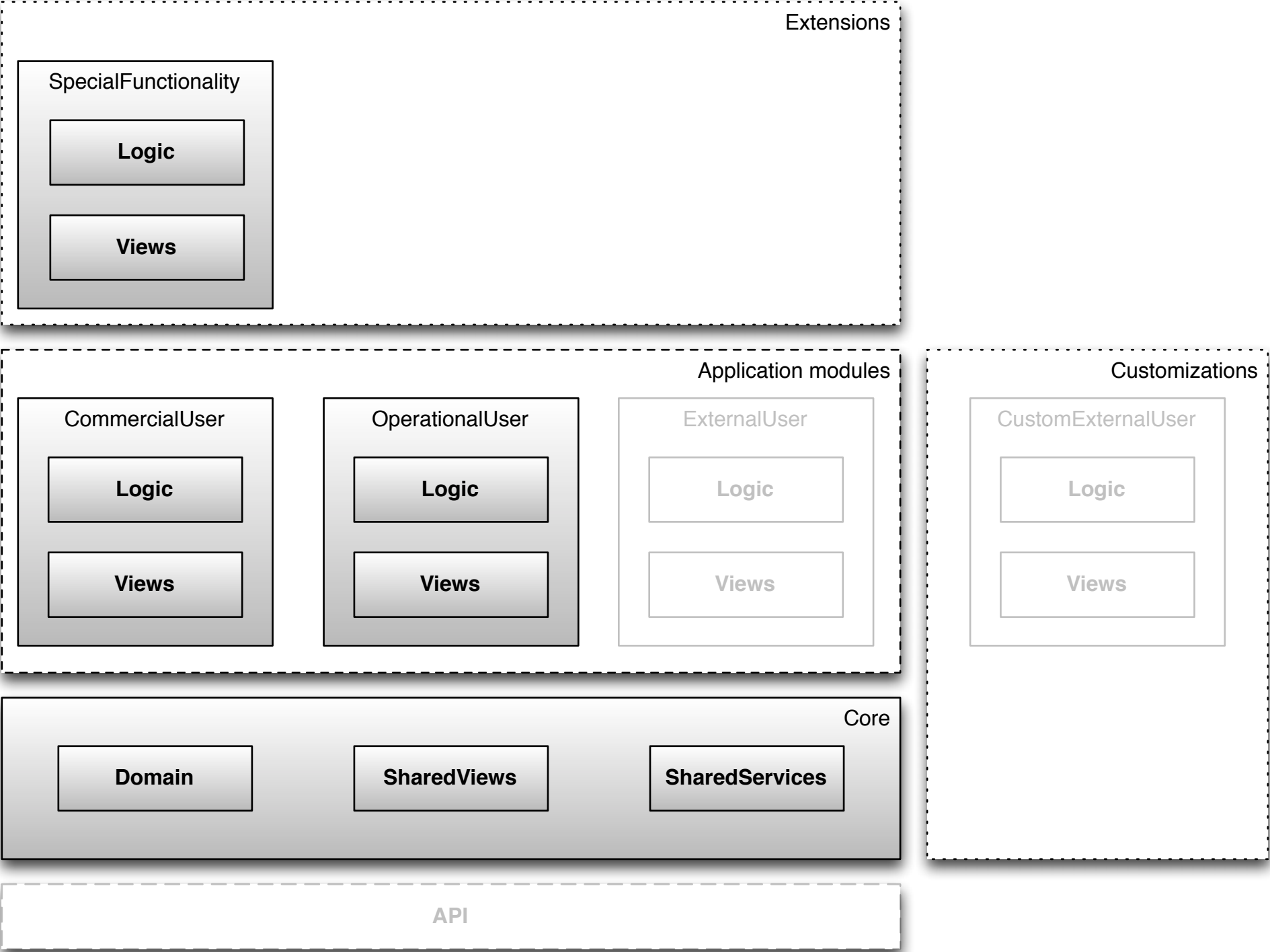
Remote development: Version: 0.8 (Build #228)

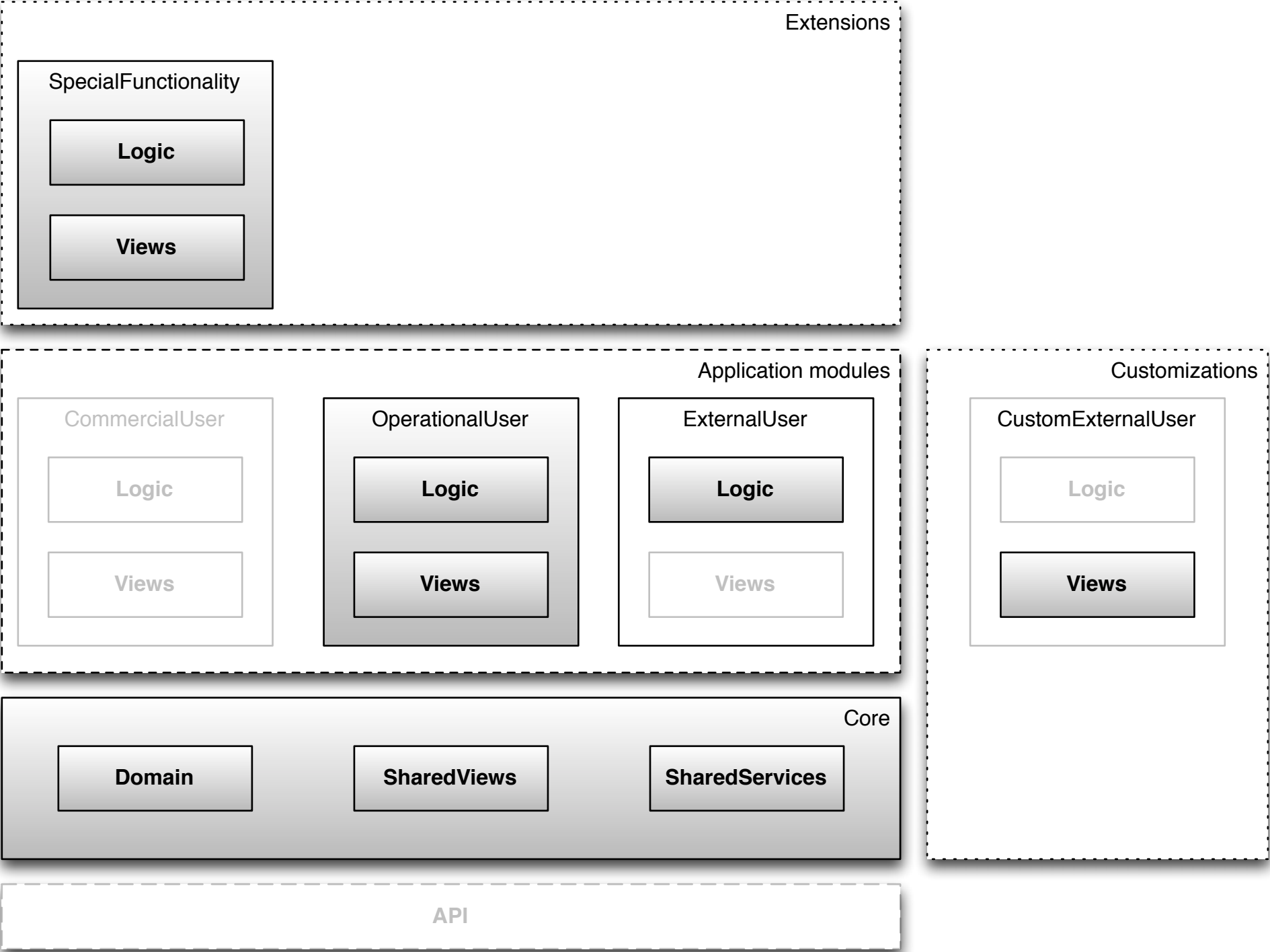
# Challenge

- ✚ Customers has varying needs
- ✚ Customers has different kind of users
- ✚ Avoid maintaining different branches
- ✚ Enable flexible business model















# Plugins

- ✚ grails create-plugin
- ✚ Basically same structure as an application
- ✚ Can depend on other plugins
- ✚ Are runnable on their own
- ✚ Testable

# Developing

- ✚ Inline plugins in dev
- ✚ Shared structure
- ✚ Code reviews

# Strategies for reuse

-  Subclassing of controllers
-  Shared templates
-  Fields plugin
-  Navigation plugin

# Testing

- ✚ Focus on Unit tests in the plugin
- ✚ Example applications for Integration & Functional testing
- ✚ CI For testing
- ✚ Manual testing

# Demo

- ✚ Record Store applications
- ✚ Shop assistants can manage albums
- ✚ Customers can browse albums
- ✚ Managers likes to know the value of what's in stock

# Lessons learned

- ✚ Try to keep as much in core as possible
- ✚ Inline plugins are deceiving
- ✚ Make sure there's still a product
- ✚ Don't make everything a new plugin
- ✚ Separate the front end app from the back end

# Thank you!

## Questions?

@AndreasArledal



```
// Feed your brain  
gr8.technologies.each{  
  yourBrain << it  
}
```