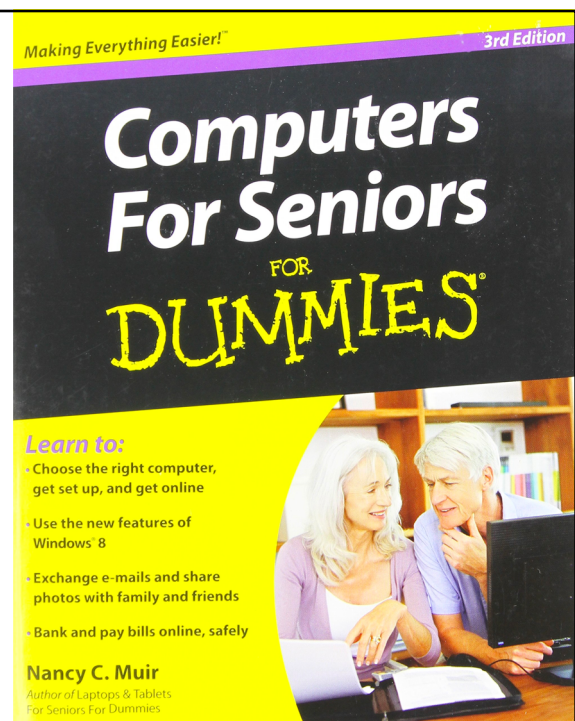


# Web Application Architectures

Lucas Marcondes

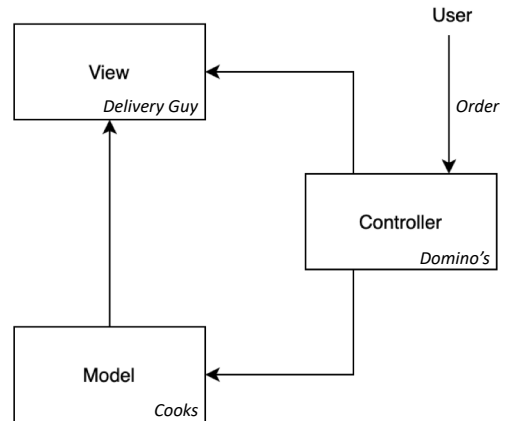
## Computers 101

- Inputs / Outputs
- Model & View
  
- Software Architectures consist of various model-view combinations and customizations



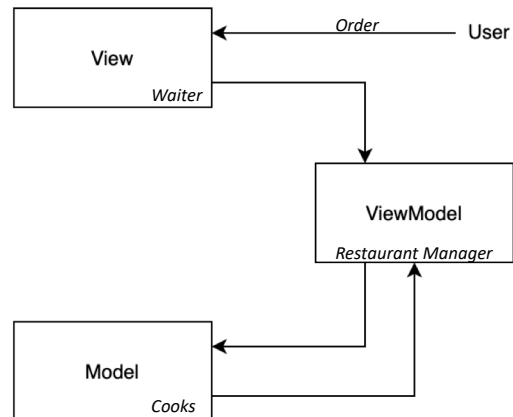
## Model-View-Controller (MVC)

- “If there exists a principle of software development, then it would be SoC – Separation of Concern. The MVC pattern is its first bold manifestation.”
- Ordering Pizza



## Model-View-ViewModel (MVVM)

- Two-Way Data Binding
- Ordering Fancy Pizza



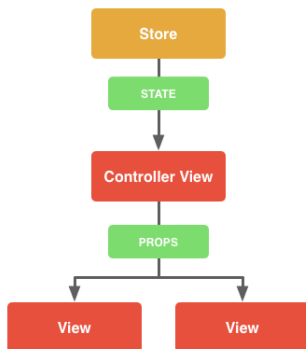
# Model-View Applicability

- Desktop Applications
- Web Applications
  - Single Page Applications
    - Presentation Layer (View)
    - Business Layer (Controller)
    - Persistence Layer (Model)

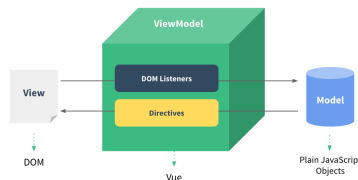


# UI Layer Frameworks

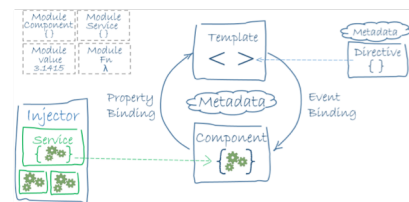
React (MVC)



Vue (MVVM)



Angular (MVVM)



## Sources

- Aglowid IT Solutions. *MVP vs MVC vs MVVM*. 6 July 2019. <<https://yourstory.com/mystory/mvp-vs-mvc-vs-mvvm>>.
- Bower, Andy and McGlashan Blair. "Twisting the Triad." n.d. *MvcTree*. <[https://mvc.givan.se/papers/Twisting\\_the\\_Triad.pdf](https://mvc.givan.se/papers/Twisting_the_Triad.pdf)>.
- Fowler, Martin. *GUI Architectures*. 18 July 2006. <[www.martinfowler.com/eaDev/uiArchs.html](http://www.martinfowler.com/eaDev/uiArchs.html)>.
- Guo, Philip and Elena Glassman. *UI Software Architecture*. Spring 2017. <[http://web.mit.edu/6.813/www/sp17/classes/05-ui-sw-arch/#reading\\_5\\_ui\\_software\\_architecture](http://web.mit.edu/6.813/www/sp17/classes/05-ui-sw-arch/#reading_5_ui_software_architecture)>.
- Patil, Harshal. *Contemporary Front-end Architectures*. 5 September 2019. <<https://blog.webf.zone/contemporary-front-end-architectures-fb5b500b0231>>.
- Pisuwala, Ubaid. *Fundamentals of web application architecture*. 2020. <<https://www.peerbits.com/blog/web-application-architecture.html>>.

Questions?