

software studio

model view controller

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what does a web app do?

routing

- › translates URLs to actions, and vice versa

presentation

- › uses HTML, CSS to display data

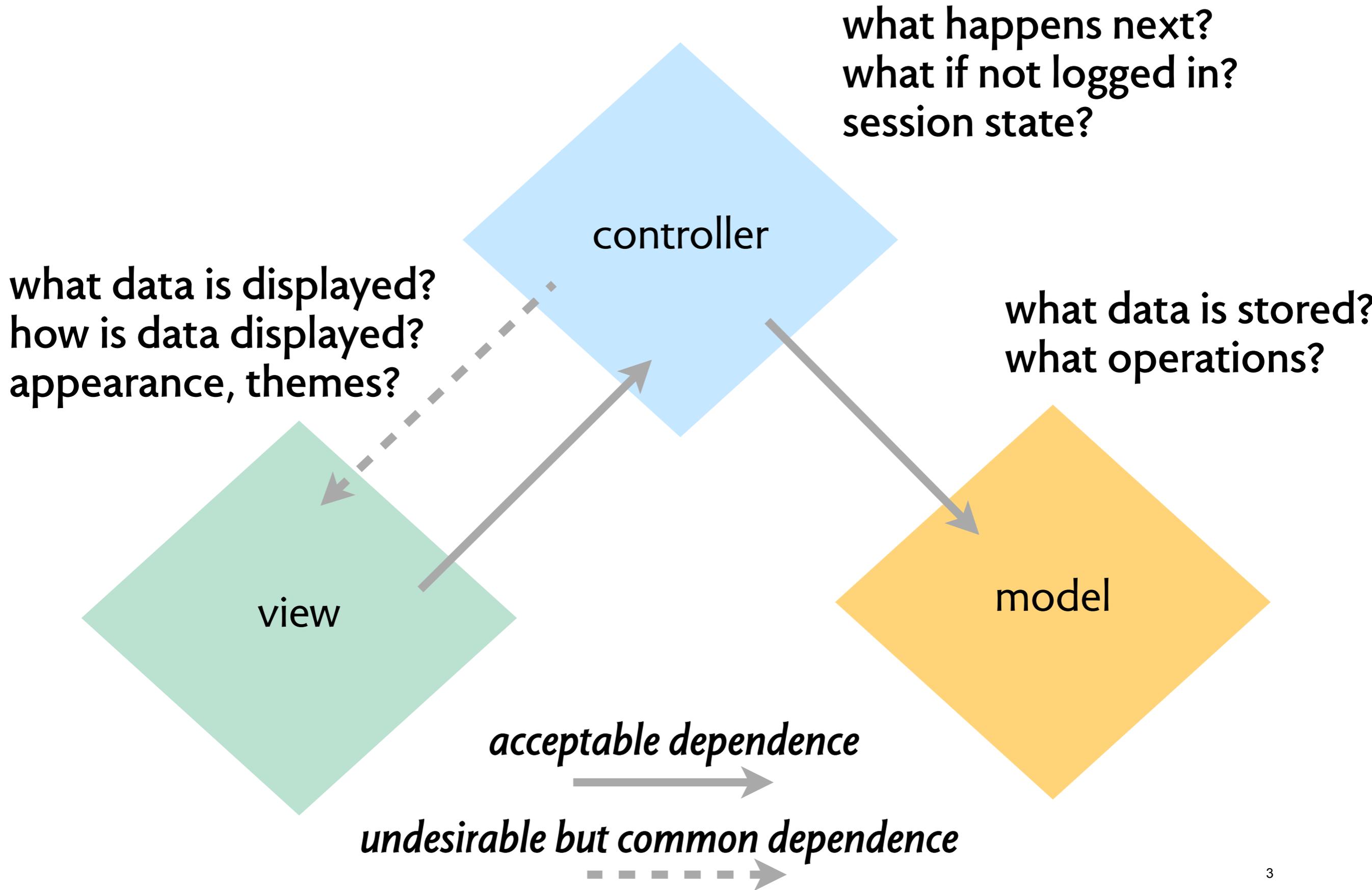
interaction & control

- › determines what user can do next

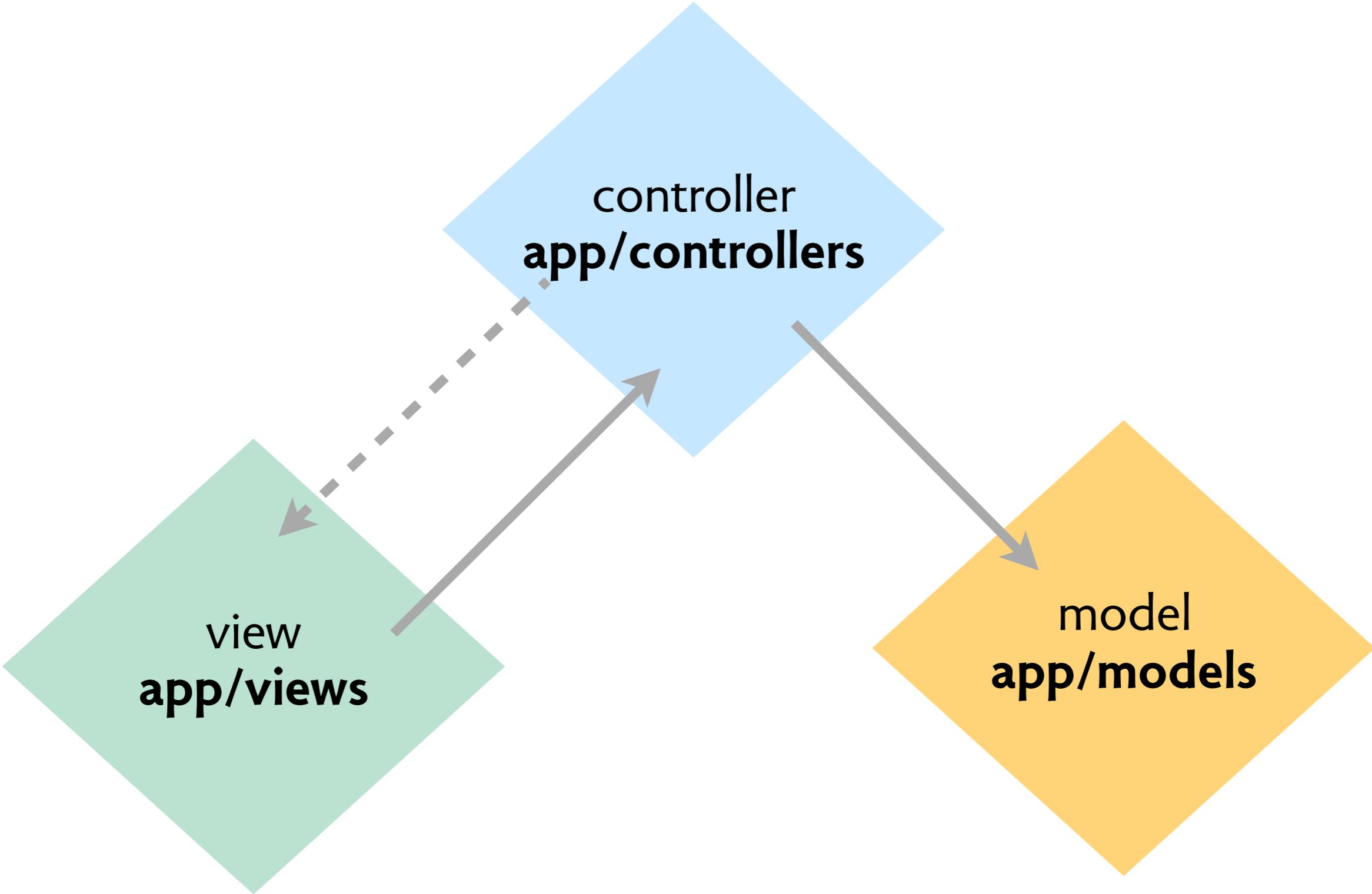
data access & storage

- › defines effect of operations on persistent state

MVC structure



MVC in Rails



example: restaurant review app

in MVC, where to make these changes?

- › increase font size of reviews
- › allow editing if logged in as author
- › change rating of zero to mean no rating

most common flaw in Rails code

putting model code in controller

› example: web analytics

```
class SitesController < ApplicationController
  def visit
    @address = params[:address]
    unless Site.exists?(["site = ?", @address])
      @site = Site.create(:site => @address, :visits => 0)
    end
    @site = Site.find(:first, :conditions => ["site = ?", @address])
    if params.has_key?(:visit_time)
      @visit_time = params[:visit_time]
      unless @site.avg_visit_time.nil?
        @site.avg_visit_time =
          ((@site.avg_visit_time *
            (@site.visits)) + @visit_time.to_i) / (@site.visits+1)
      else
        @site.avg_visit_time = @visit_time.to_i
      end
    end
    @site.visits += 1
    @site.save
  end
end
```

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