lecture 3
design patterns
This is CS164 CS164
when did classmates take CS50?

- 2011: 34%
- 2010: 30%
- 2009: 17%
- 2008: 5%
- didn’t: 14%
changes

sections

labs design reviews, code reviews, office hours

alphas

new release cycle
new release cycle

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<td>Design Doc, Style Guide</td>
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workload
project 1
## Project 1: Students’ Choice of Web Apps

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https://projects.cs50.net/projects/mobile/
lectures

OOP
iOS
iOS, continued
iOS, continued
Unit Tests
...
Scalability
Security
1.5x
design patterns

MVC
singleton
DAO
active record
factory
lazy loading
observer
...
...
active record
$course = new Course();
$course->cat_num = 7295;
$course->title = "Mobile Software Engineering";
$course->save();
singleton
DAO

data access object
ORM

Doctrine

Propel

...
frameworks

Codelgniter
Kohana
Symphony
Yii
Zend
...

to be continued...