



Alumni Engagement Recording System Design Review

Ronak Gajrawala, Mickey Hoang, Yutong Li

COEN 174



Introduction

- << ADD PROBLEM AND SOLUTION >>
- Details design choices, use-cases
- Previews architectural diagrams and conceptual models
- Reviews requirements



Requirements

User

- View alumni events on a calendar
- Interact with these events online
- Submit unofficial events

Alumni Office

- View, approve, edit alumni events
- View and export data collected from user interaction
- Submit official events

Use-Cases

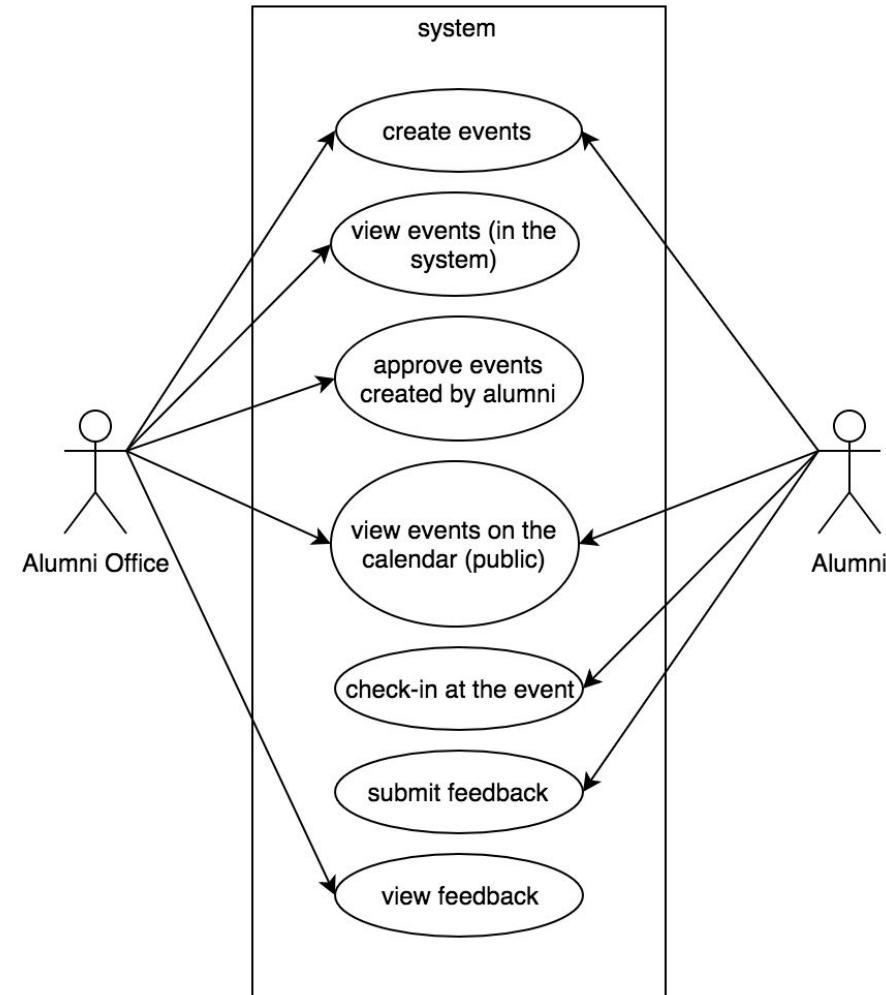


Figure 1: Case diagram of the system

Activity Diagrams

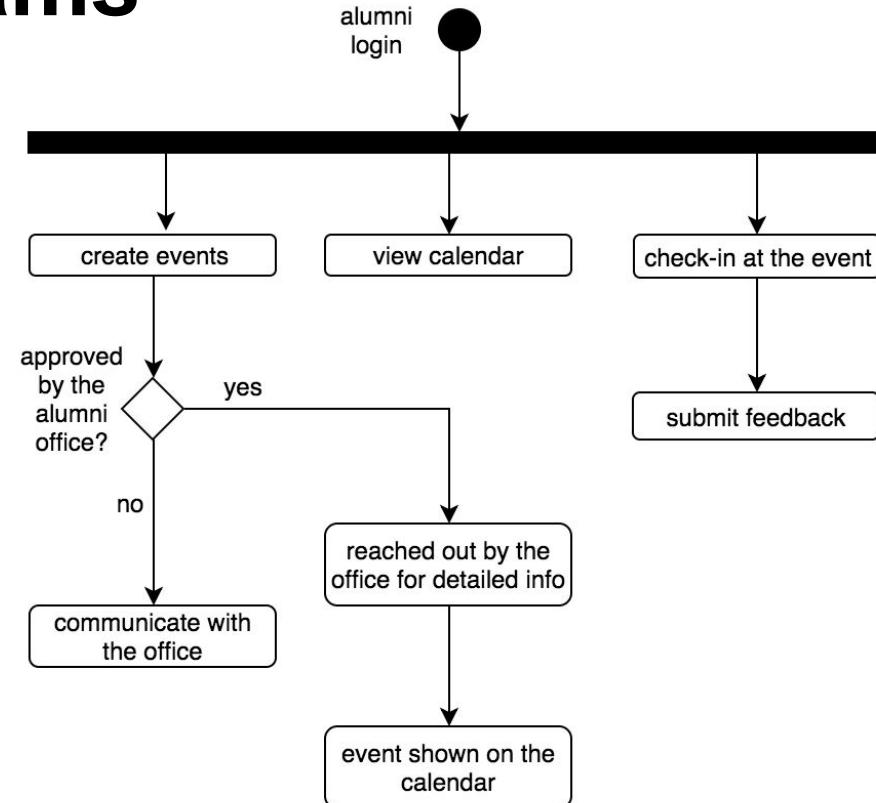


Figure 2: Activity diagram for alumni use

Activity Diagrams

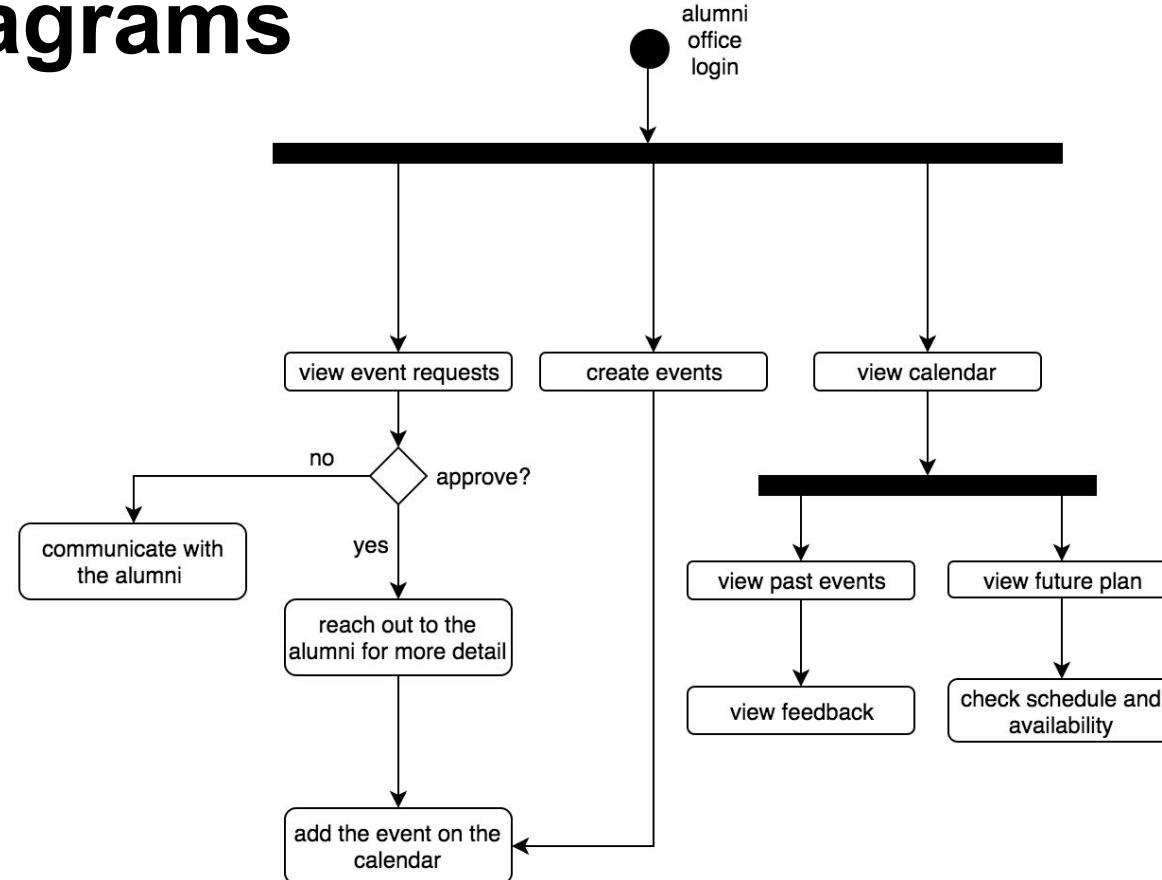


Figure 3: Activity diagram for Alumni Office use



Conceptual Model

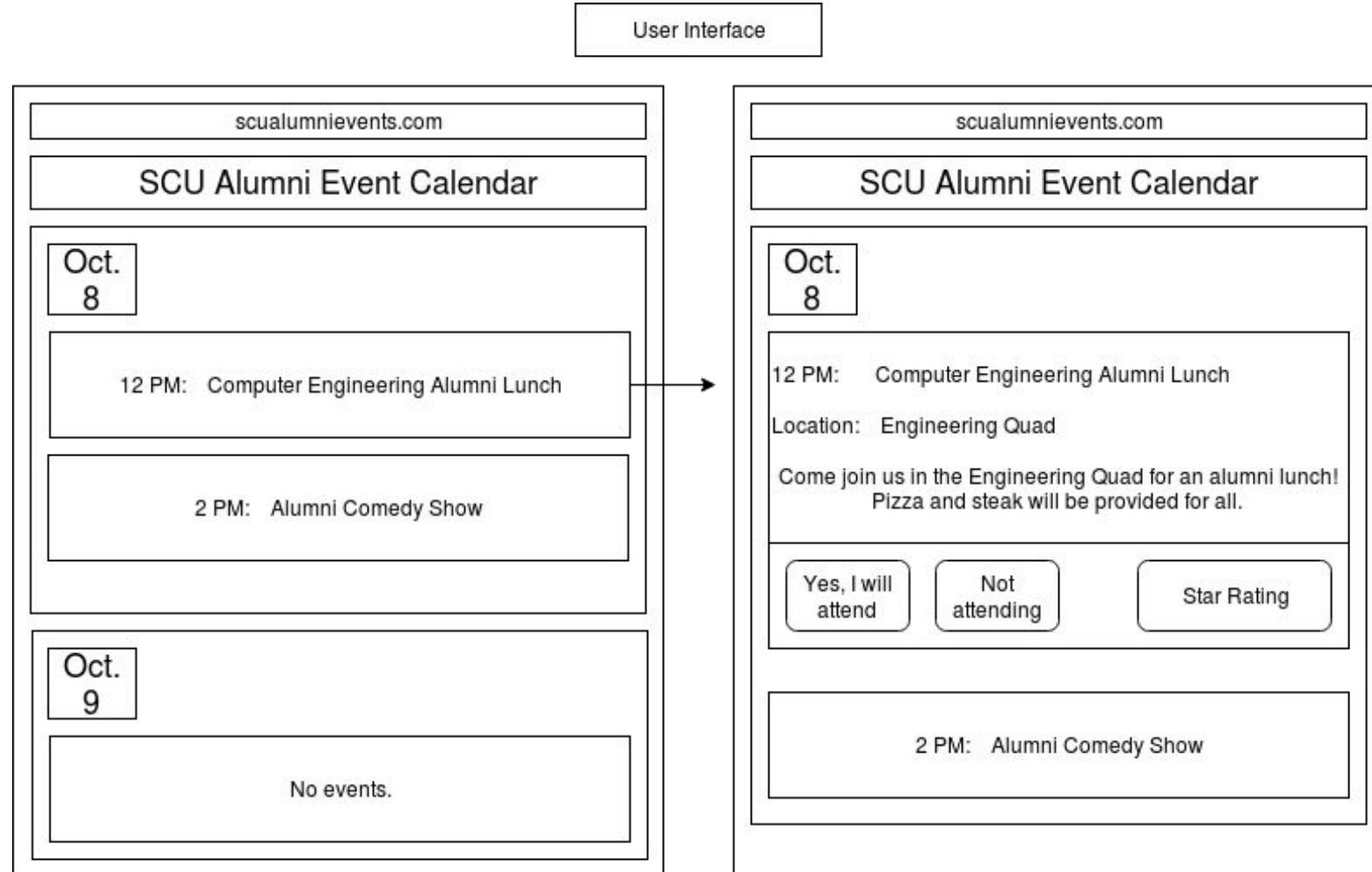


Figure 4: Conceptual Model of Website



Conceptual Model (cont.)

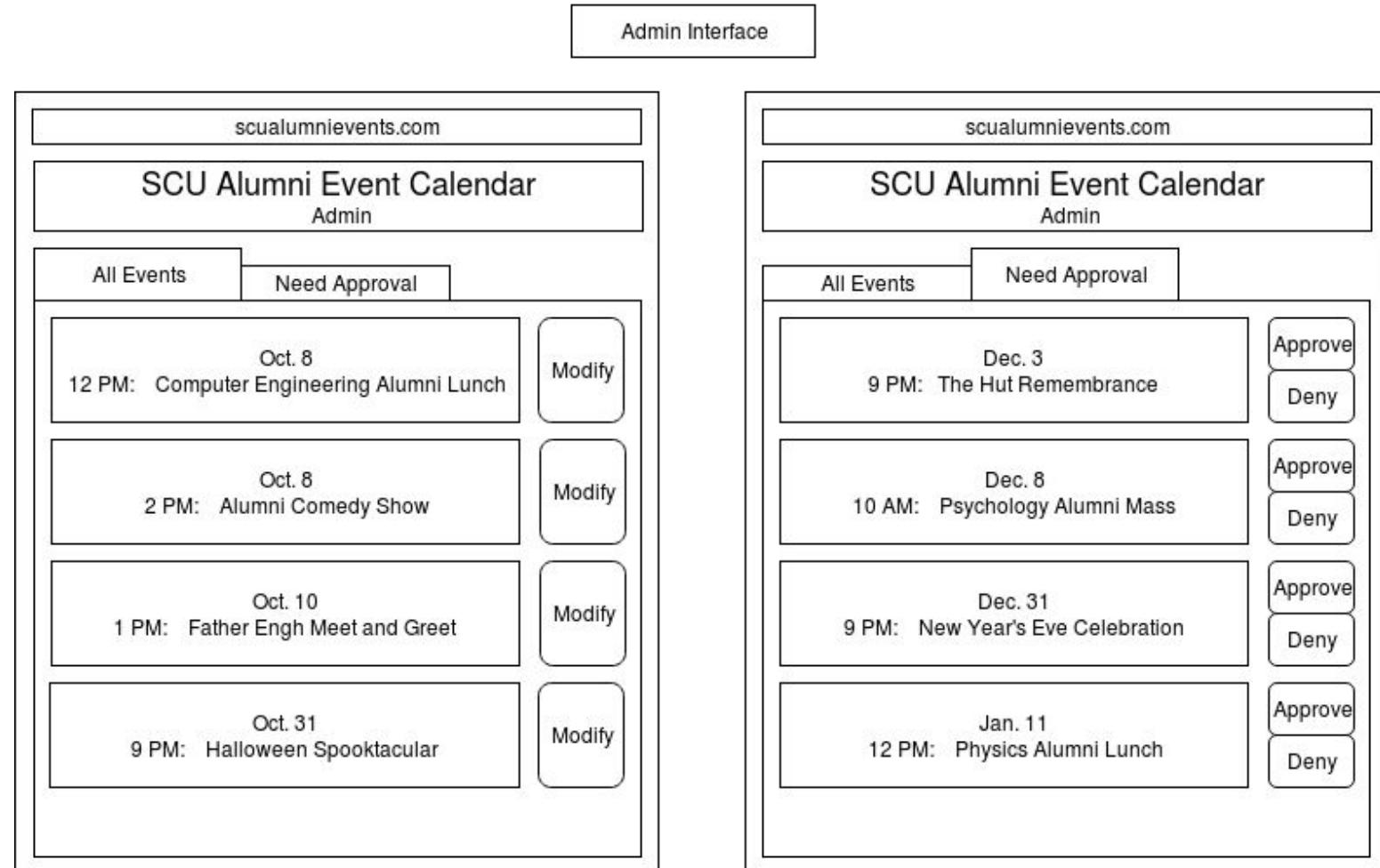


Figure 5: Conceptual Model of Website (cont.)

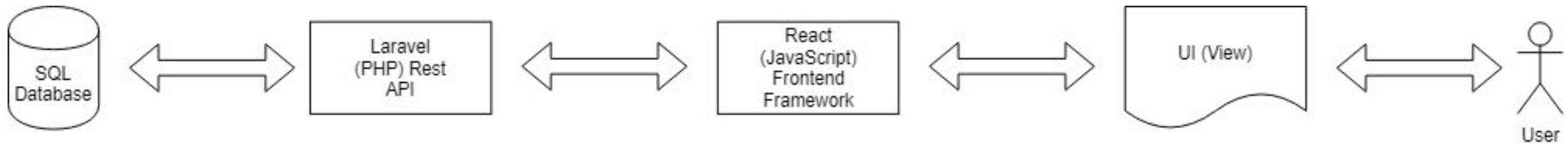


Technologies Used

- Back-End (Server-Side)
 - MySQL DBMS
 - Apache (HTTPD)
 - PHP 5 + Laravel
- Front-End (Client-Side)
 - SPA
 - HTML5 + CSS3 + JavaScript (ES2018)
 - ReactJS
 - Bootstrap UI Library
 - Webpack



Architectural Diagram





Design Rationale

- Accessible and functional
- Technological choices impacted by host
- Low coupling, high cohesion
- Mobile-friendly
- Intuitive and navigable



Test Plan (first phase)

- Functional test plan:
 - Create events
 - View the calendar
 - Approve/reject events (Alumni Office only)
- Security test plan:
 - General access: Alumni Office and alumni
 - Administrative access: Alumni Office



Test Plan (second phase)

- Too many users access the system at the same time
 - inform the admin the number of users
 - limit the maximum number of users at a time



Risk Analysis

- System not fully completed on time
 - Set deadlines
 - Prioritize core functionality
- Bugs
 - Write easily readable and debuggable code
 - Implement functional tests
- DC downtime or slowdown
 - Possible mirror server on a separate host
- Data breach
 - Store minimal amount of user data - only emails
 - Securely store admin and database credentials
 - Install security updates



Developmental Timeline

	Task Name	week1 (Sep. 17-21)					week2 (Sep. 24-28)					week3 (Oct. 1-5)					week4 (Oct. 8-12)					
		M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
1	Select the project and work on problem statement								Group													
2	Design report															Group						
3	Design review presentation (slides)																Group					
4	Front-End																					
5	- Calendar																					
6	- Interactive Events																					
7	- Weight based event showing																					
8	Admin Side																					
9	- Modify/Remove/Add Events to Calendar																					
10	- Approval of Events																					
11	- View collected data																					
12	Testing																					
13	Final Revisions																					



Developmental Timeline (cont.)

	Task Name	week5 (Oct. 15-19)					week6 (Oct. 22-26)					week7 (Oct. 29-Nov. 2)					week8 (Nov. 5-9)											
		M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	Select the project and work on problem statement																											
2	Design report																											
3	Design review presentation (slides)																											
4	Front-End																											
5	- Calendar																											
6	- Interactive Events																											
7	- Weight based event showing																											
8	Admin Side																											
9	- Modify/Remove/Add Events to Calendar																											
10	- Approval of Events																											
11	- View collected data																											
12	Testing																											
13	Final Revisions																											



SANTA CLARA UNIVERSITY

Thank you



Questions?



Large Quotes should be treated
this way.

Name Underneath Arial 20 pt.

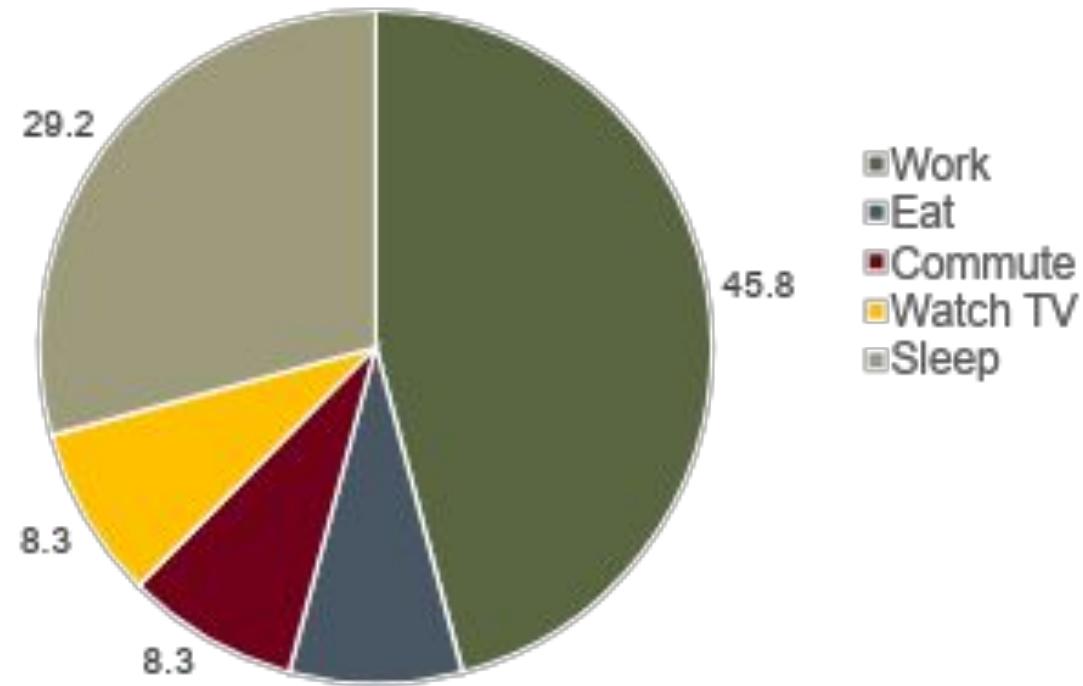


Bullet Format

- Use “smart” quotes
- Fiscal years should be formatted as FY '18
- Highlight in this **color and bold** for overheads
- Hyperlink: www.scu.edu
- Correct dashes used: -, –, —

Chart Example

Chart Subtitle Arial 24 pt.



School or Department, Arial 14 pt.



Chart Title

Chart Subtitle Arial 24 pt.

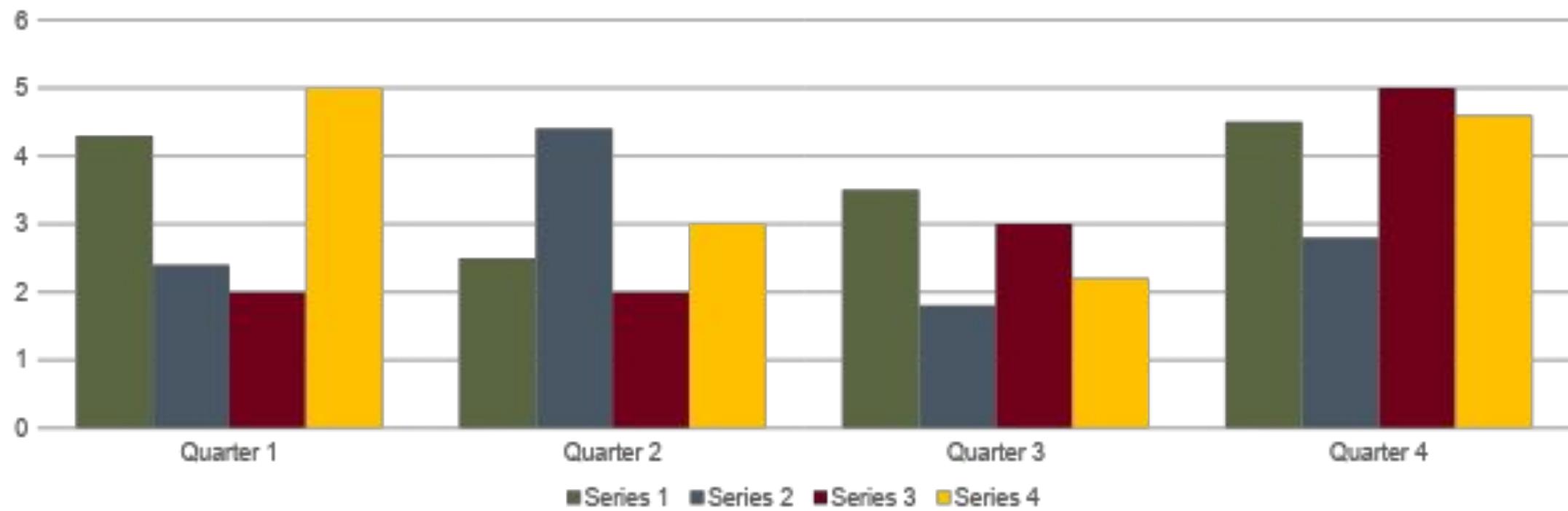




Table Example

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Data Series 1	36	26	115	300
Data Series 2	56	36	48	56
Data Series 3	23	48	65	79
Data Series 4	56	56	89	51



Alternate Title Slide



Alternate Section heading slide

Use sparingly to break up a long presentation