Increase Student Success with a Transformed Class Schedule

Community College League of California

Robert Bramucci, Ph.D., Vice-Chancellor, Technology and Learning Services
Jim Gaston, Director, IT – Academic Systems

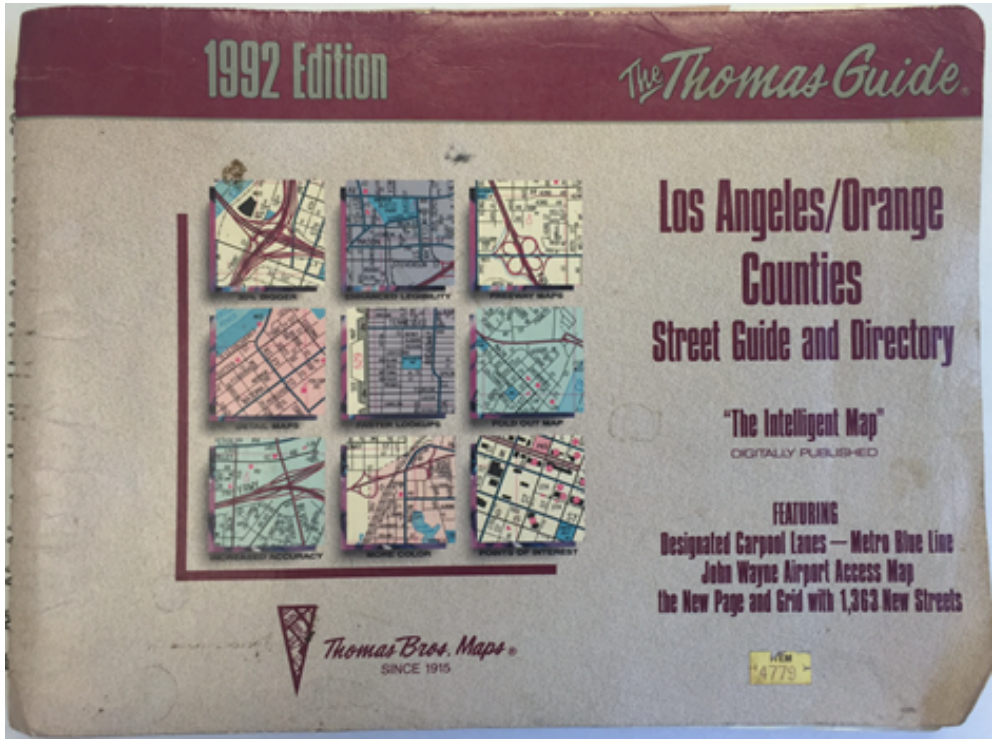
Agenda

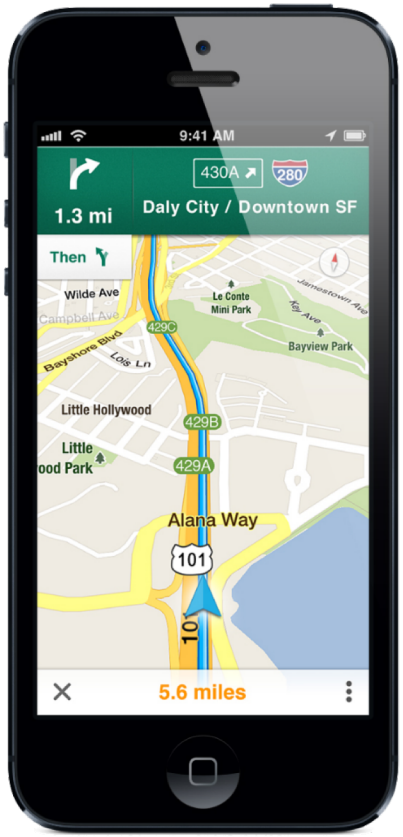
- About Us
- Project Goals
- SmartSchedule Background
- Demonstration
- Next Steps – How You Can Get Involved

About Us

- About the SOCCCD
  - Two-college district in southern California
  - Approximately 43,000 students/term (23,000 FTES)
- Two Colleges, Three Campuses
  - Saddleback College in Mission Viejo
  - Irvine Valley College in Irvine
  - Advanced Technology and Education Park (ATEP) in Tustin

SmartSchedule Goal





SmartSchedule Background

Class schedule was the first web application we built in 1995. IDML program ran on a VAX and generated a set of HTML files each night.

Home | Index | Prev | Next

Irvine Valley College

DRAFTING

DR 100 FUNDAMENTALS OF MECHANICAL DRAFTING

Introduces the design process, the proper use of drafting instruments, lettering, geometric construction, multiview projection, pictorial drawings, ANSI and ISO dimensioning.
Course fee of $12.00 payable at registration.

Ticket	Weeks	From	To	Time	Days	Instructor	Location
60995A	16.6	24-Aug-98	19-Dec-98	04:00PM-07:00	M W	Collins, D	B 363

DR 101 MECHANICAL DRAFTING

Develops the basic skills required to produce industrial quality assembly and detail drawings. Includes basic design processes used for machine drawings, castings, cams, weldments, and power transmissions, with integrated problems and solutions.
Course fee of $12.00 payable at registration.

Ticket	Weeks	From	To	Time	Days	Instructor	Location
60995D	16.6	24-Aug-98	19-Dec-98	04:00PM-07:00	M W	Collins, D	B 363

DR 102 MECHANICAL DRAFTING AND DESIGN

Develops the basic skills needed for industrial-level mechanical drawing and conceptual design.
Course fee of $12.00 payable at registration.

Ticket	Weeks	From	To	Time	Days	Instructor	Location
90070	16.6	24-Aug-98	19-Dec-98	TBA	TBA	Collins, D	TBA

DR 150 INTRODUCTION TO COMPUTER-AIDED DRAFTING

An introductory computer-aided drafting (CAD) course for all applications. Students use the CAD system to create and analyze 2-D and pictorial drawings conforming to ANSI standards.
Course fee of $12.00 payable at registration.

Ticket	Weeks	From	To	Time	Days	Instructor	Location
61000A	16.6	24-Aug-98	19-Dec-98	12:30PM-03:30	T Th	Collins, D	B 363
61005	16.6	24-Aug-98	19-Dec-98	07:00PM-10:00	M W	Collins, D	B 363

AUTO105

AUTOMOTIVE POWER TRAIN

3 Units - 2 hours lecture 2 hours lab

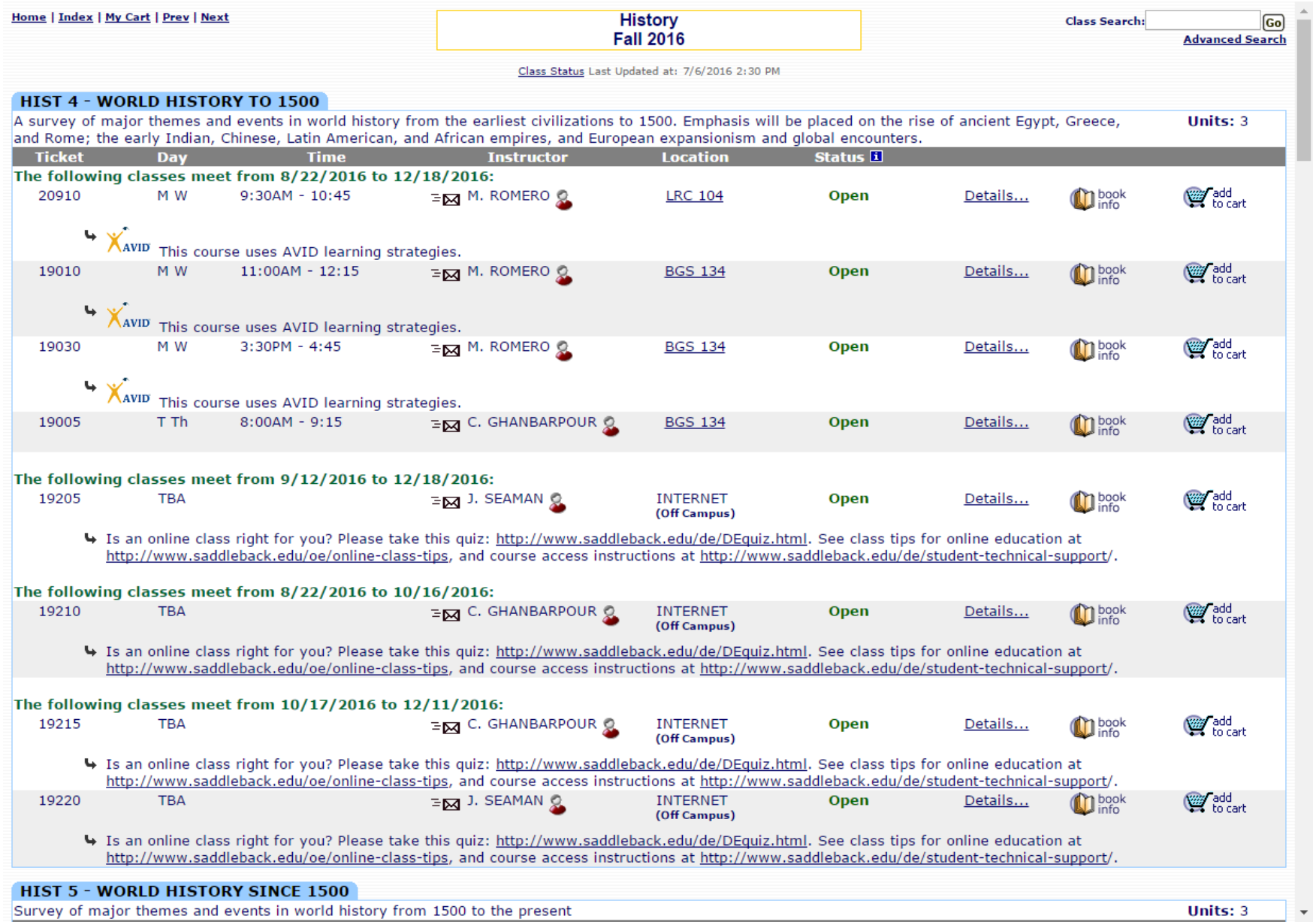
Prerequisite: None
Limitation: None
Corequisite: None
Recommended Preparation: AUTO 100

Course Description: Operating principles and overhaul and repair procedures of automotive power trains including clutches, three- and four- speed synchromesh transmissions, overdrives, drive line, differentials, and rear axles. Demonstrated lectures and practical experience in the laboratory on power train components. Outside assignments are required. (R-E)

Other Information

- Typical Assignments
- Topics Covered
- Learning Objectives
- Methods of Evaluation

Upgraded to SmartSchedule in July 2002



Home | Index | My Cart | Prev | Next

History
Fall 2016

Class Search: Go
Advanced Search

Class Status Last Updated at: 7/6/2016 2:30 PM

HIST 4 - WORLD HISTORY TO 1500

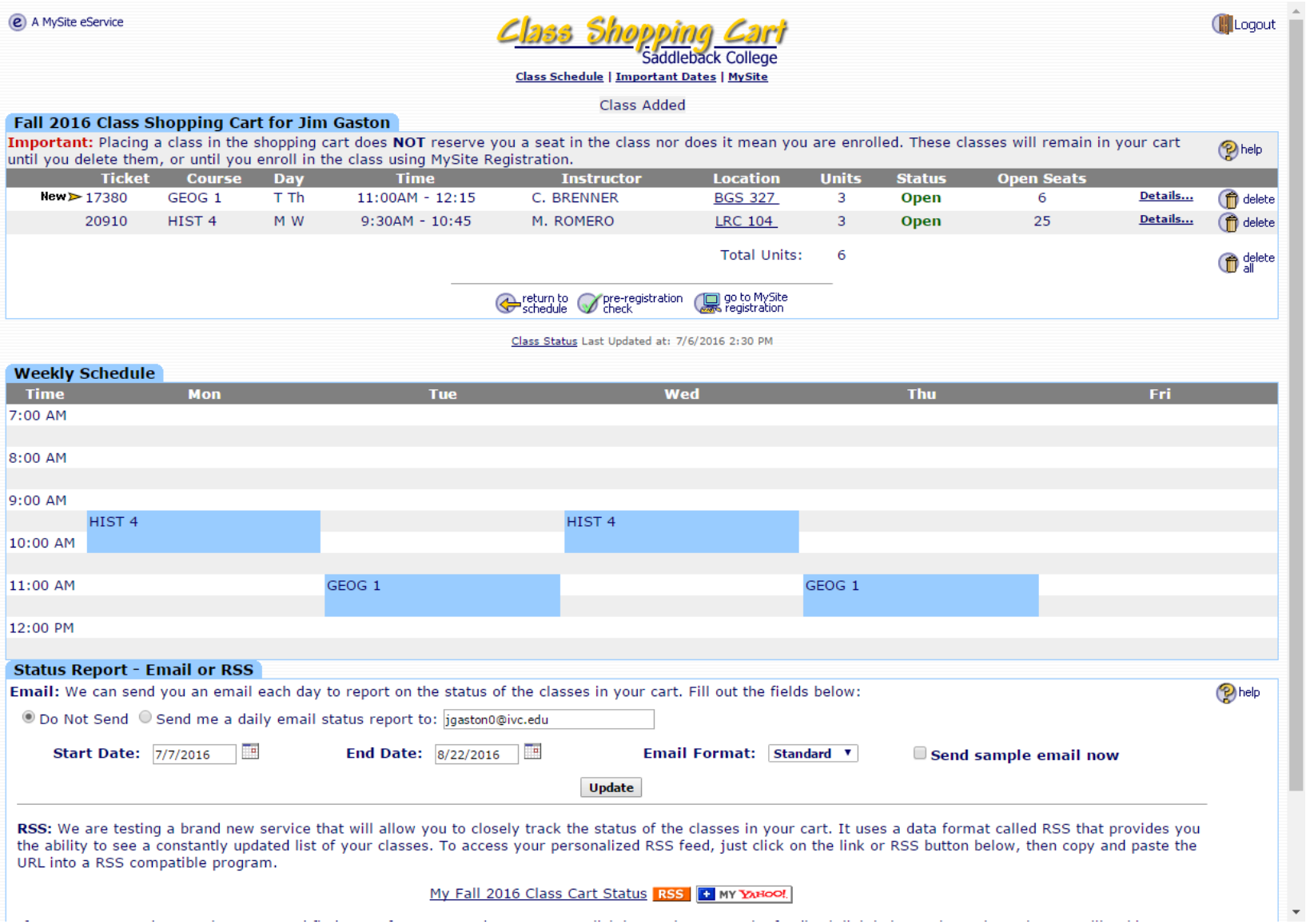
A survey of major themes and events in world history from the earliest civilizations to 1500. Emphasis will be placed on the rise of ancient Egypt, Greece, and Rome; the early Indian, Chinese, Latin American, and African empires, and European expansionism and global encounters. **Units:** 3

Ticket	Day	Time	Instructor	Location	Status			
The following classes meet from 8/22/2016 to 12/18/2016:								
20910	M W	9:30AM - 10:45	M. ROMERO	LRC 104	Open	Details...	book info	add to cart
↳ AVID This course uses AVID learning strategies.								
19010	M W	11:00AM - 12:15	M. ROMERO	BGS 134	Open	Details...	book info	add to cart
↳ AVID This course uses AVID learning strategies.								
19030	M W	3:30PM - 4:45	M. ROMERO	BGS 134	Open	Details...	book info	add to cart
↳ AVID This course uses AVID learning strategies.								
19005	T Th	8:00AM - 9:15	C. GHANBARPOUR	BGS 134	Open	Details...	book info	add to cart
The following classes meet from 9/12/2016 to 12/18/2016:								
19205	TBA		J. SEAMAN	INTERNET (Off Campus)	Open	Details...	book info	add to cart
↳ Is an online class right for you? Please take this quiz: http://www.saddleback.edu/de/DEquiz.html. See class tips for online education at http://www.saddleback.edu/oe/online-class-tips, and course access instructions at http://www.saddleback.edu/de/student-technical-support/.								
The following classes meet from 8/22/2016 to 10/16/2016:								
19210	TBA		C. GHANBARPOUR	INTERNET (Off Campus)	Open	Details...	book info	add to cart
↳ Is an online class right for you? Please take this quiz: http://www.saddleback.edu/de/DEquiz.html. See class tips for online education at http://www.saddleback.edu/oe/online-class-tips, and course access instructions at http://www.saddleback.edu/de/student-technical-support/.								
The following classes meet from 10/17/2016 to 12/11/2016:								
19215	TBA		C. GHANBARPOUR	INTERNET (Off Campus)	Open	Details...	book info	add to cart
↳ Is an online class right for you? Please take this quiz: http://www.saddleback.edu/de/DEquiz.html. See class tips for online education at http://www.saddleback.edu/oe/online-class-tips, and course access instructions at http://www.saddleback.edu/de/student-technical-support/.								
19220	TBA		J. SEAMAN	INTERNET (Off Campus)	Open	Details...	book info	add to cart
↳ Is an online class right for you? Please take this quiz: http://www.saddleback.edu/de/DEquiz.html. See class tips for online education at http://www.saddleback.edu/oe/online-class-tips, and course access instructions at http://www.saddleback.edu/de/student-technical-support/.								

HIST 5 - WORLD HISTORY SINCE 1500

Survey of major themes and events in world history from 1500 to the present **Units:** 3

Shopping Cart added in Fall 2004



In Spring 2016 students created 30,791 shopping carts

Received the State Chancellor's Office Technology Focus Award in 2005

SOCCCD Student Success Systems

MAP

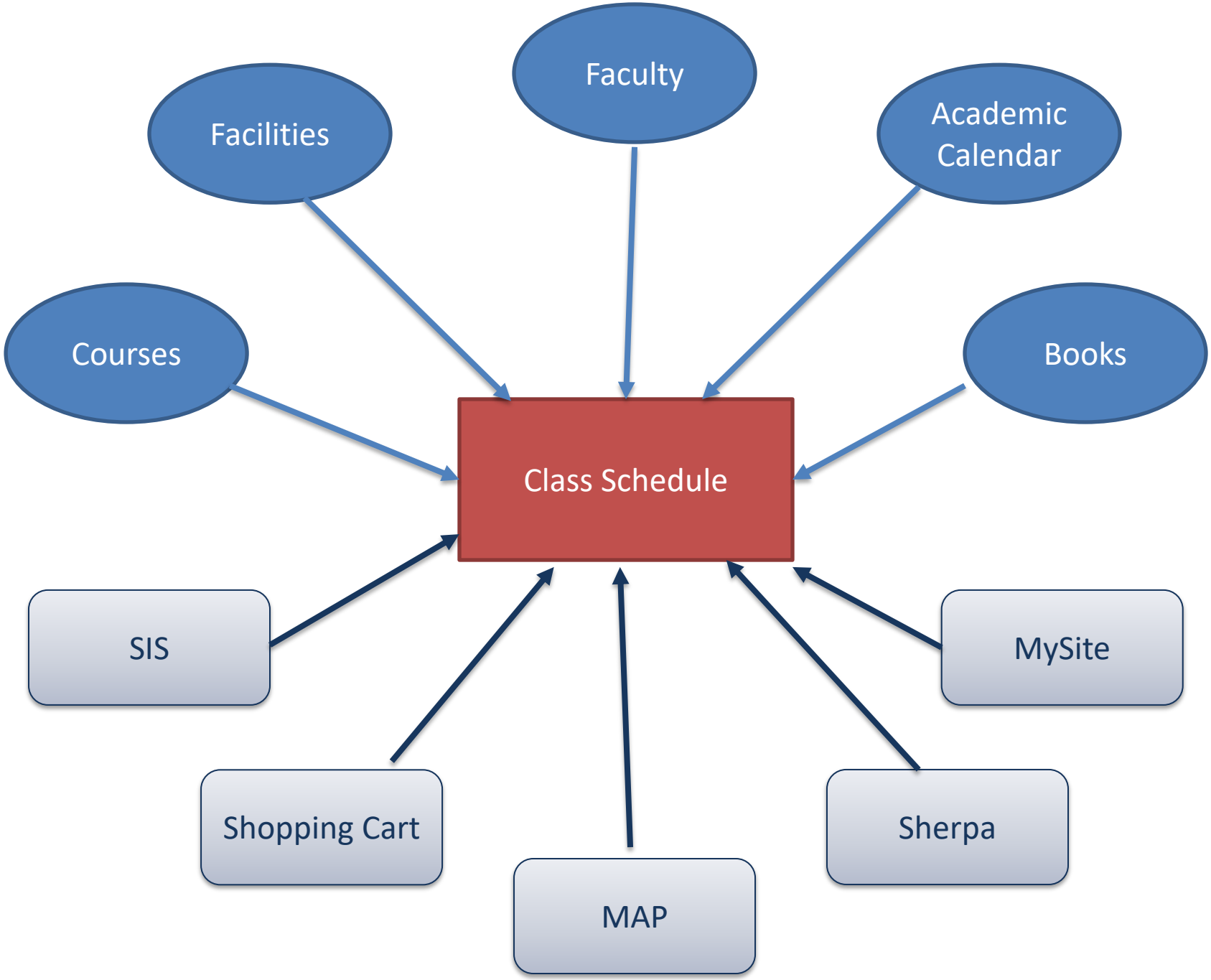
Sherpa

Predictive Analytics

Student Success Dashboard

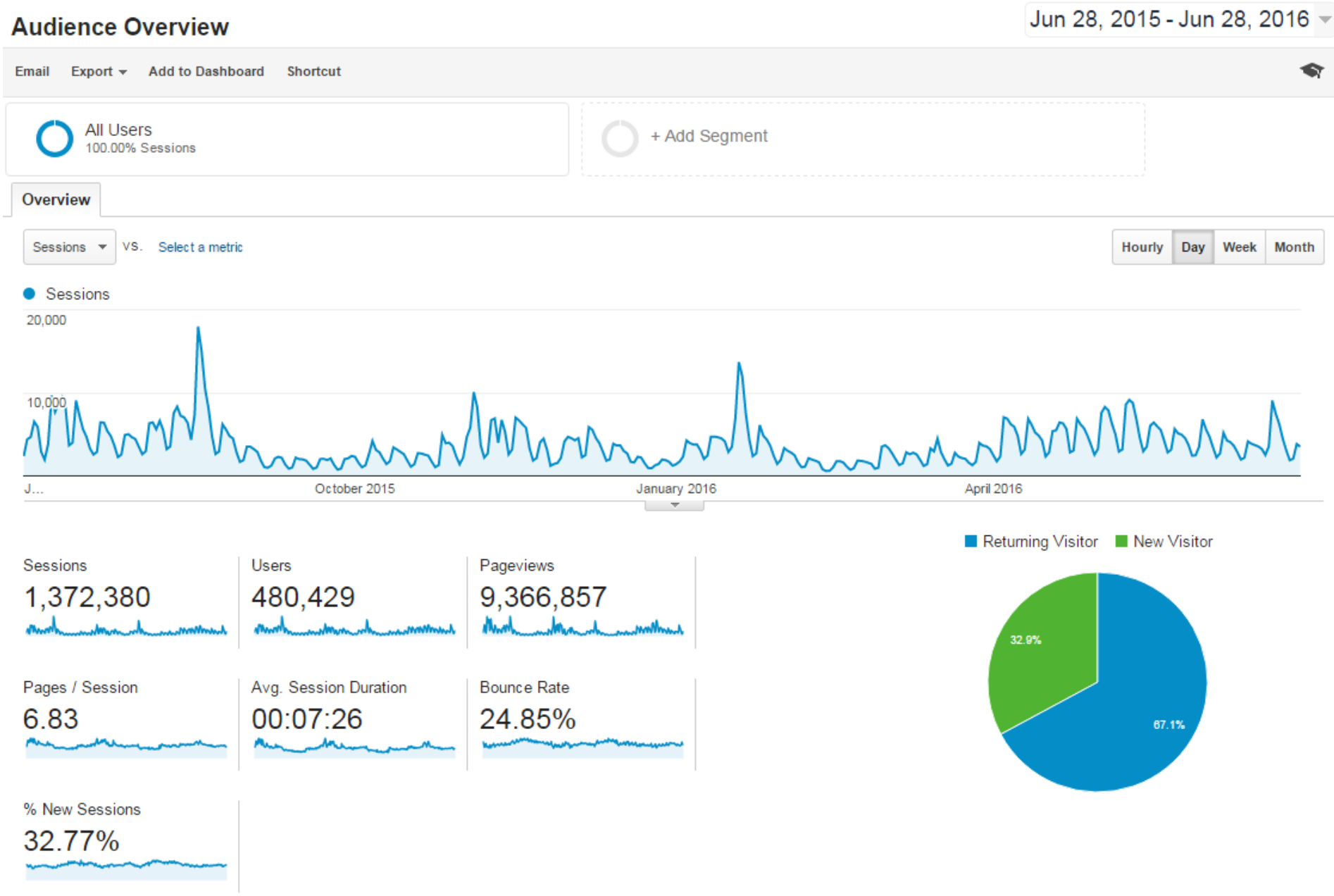
Progress Report (Early Alert)

SmartSchedule


Faculty
Facilities
Academic Calendar
Courses
Books
Class Schedule
SIS
MySite
Shopping Cart
MAP
Sherpa

Design Considerations

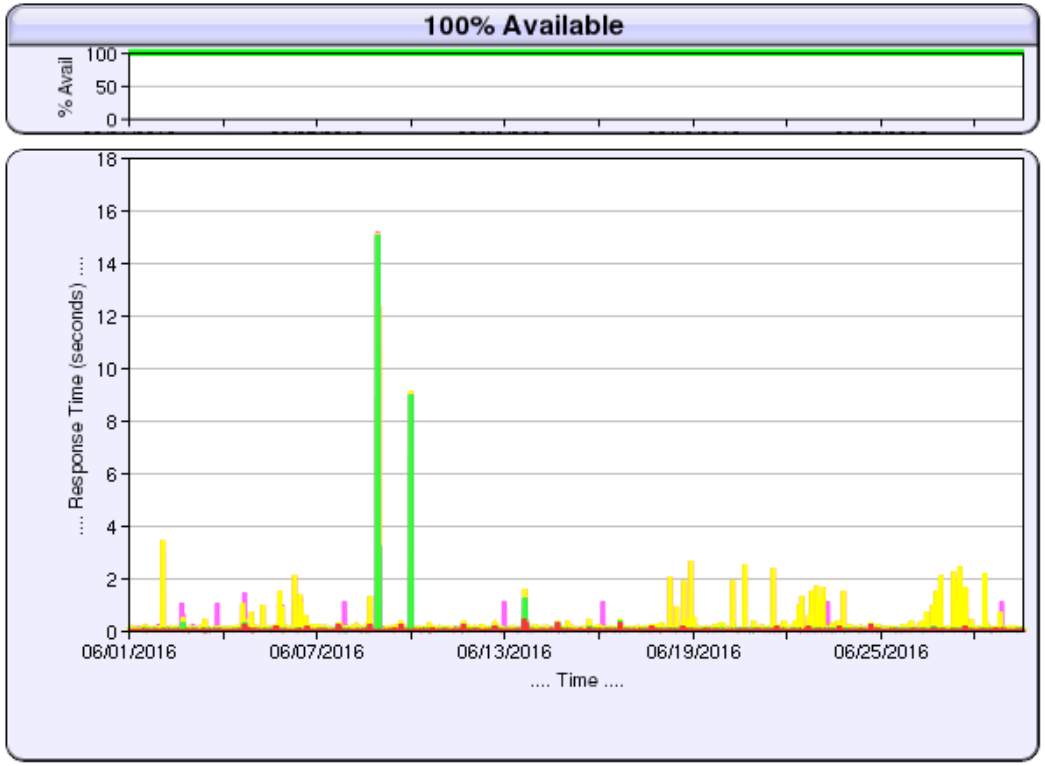
Traffic


Audience Overview
Jun 28, 2015 - Jun 28, 2016
Email
Export
Add to Dashboard
Shortcut
All Users
100.00% Sessions
+ Add Segment
Overview
Sessions
VS.
Select a metric
Hourly
Day
Week
Month
Sessions
20,000
10,000
J...
October 2015
January 2016
April 2016
Sessions
1,372,380
Users
480,429
Pageviews
9,366,857
Pages / Session
6.83
Avg. Session Duration
00:07:26
Bounce Rate
24.85%
% New Sessions
32.77%
Returning Visitor
New Visitor
32.9%
67.1%

Performance

Site Name: SmartSchedule Page
Customer: South Orange County CC District
Locations: Los Angeles

From: 2016-06-01 00:00
Thru: 2016-06-29 13:11



Legend:

DNS Lookup | Connect | Redirect | First Byte | Content

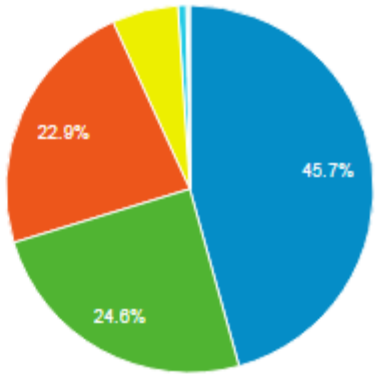
Show Bar Chart

Transaction Load Analysis

	Response	DNS	Connect	Redirect	FirstByte	Content	DOM Load	Page Load
Avg	0.1379	0.0105	0.0175	0.0000	0.1060	0.0037	0.3414	0.3486
Min	0.0580	0.0000	0.0105	0.0000	0.0461	0.0000	0.1368	0.1408
Max	15.1763	0.4424	15.0423	0.0000	13.4641	1.0046	21.7174	21.7254
STD	0.3919	0.0220	0.2525	0.0000	0.2719	0.0422	0.6057	0.6062

Mobile

	1,372,380 % of Total: 100.00% (1,372,380)	1,372,380 % of Total: 100.00% (1,372,380)
1. Windows	626,934	45.68%
2. Macintosh	337,715	24.61%
3. iOS	313,624	22.85%
4. Android	79,837	5.82%
5. Chrome OS	9,894	0.72%
6. Linux	2,896	0.21%
7. Windows Phone	1,153	0.08%
8. BlackBerry	221	0.02%
9. (not set)	58	0.00%
10. Xbox	23	0.00%



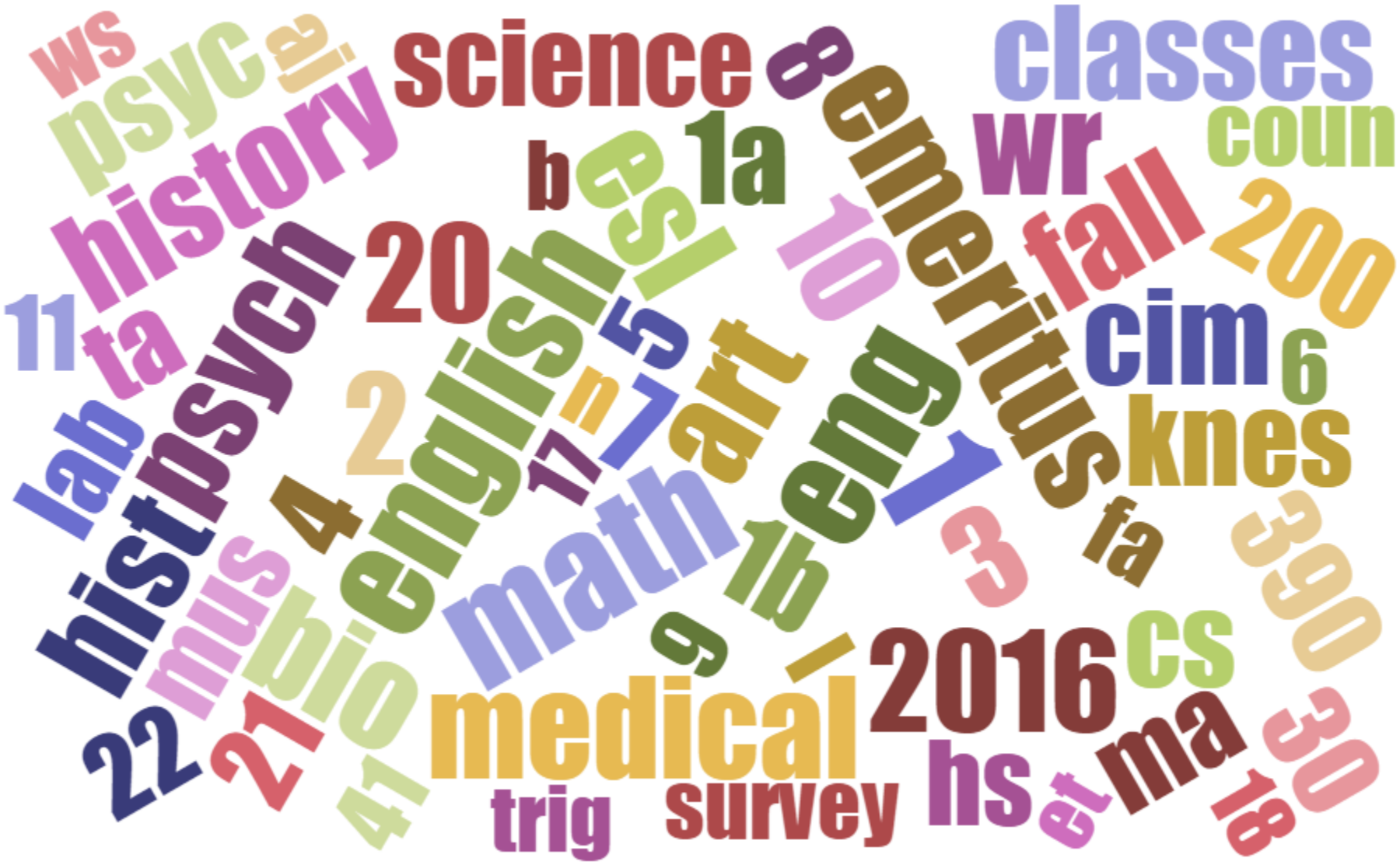
Search

In the last year there were 271,610 searches in SmartSchedule, averaging 744/day.

Type	Success	Fail	Fail %
Simple	58,884	24,195	29%
Advanced	139,126	49,405	26%
Total	198,010	73,600	27%

Successful Searches

Unsuccessful Searches

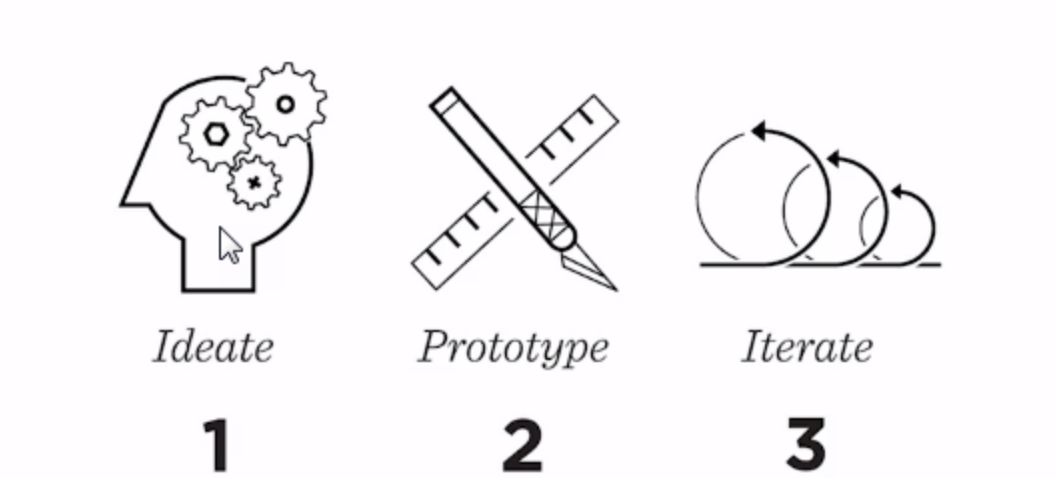


Choice Architecture

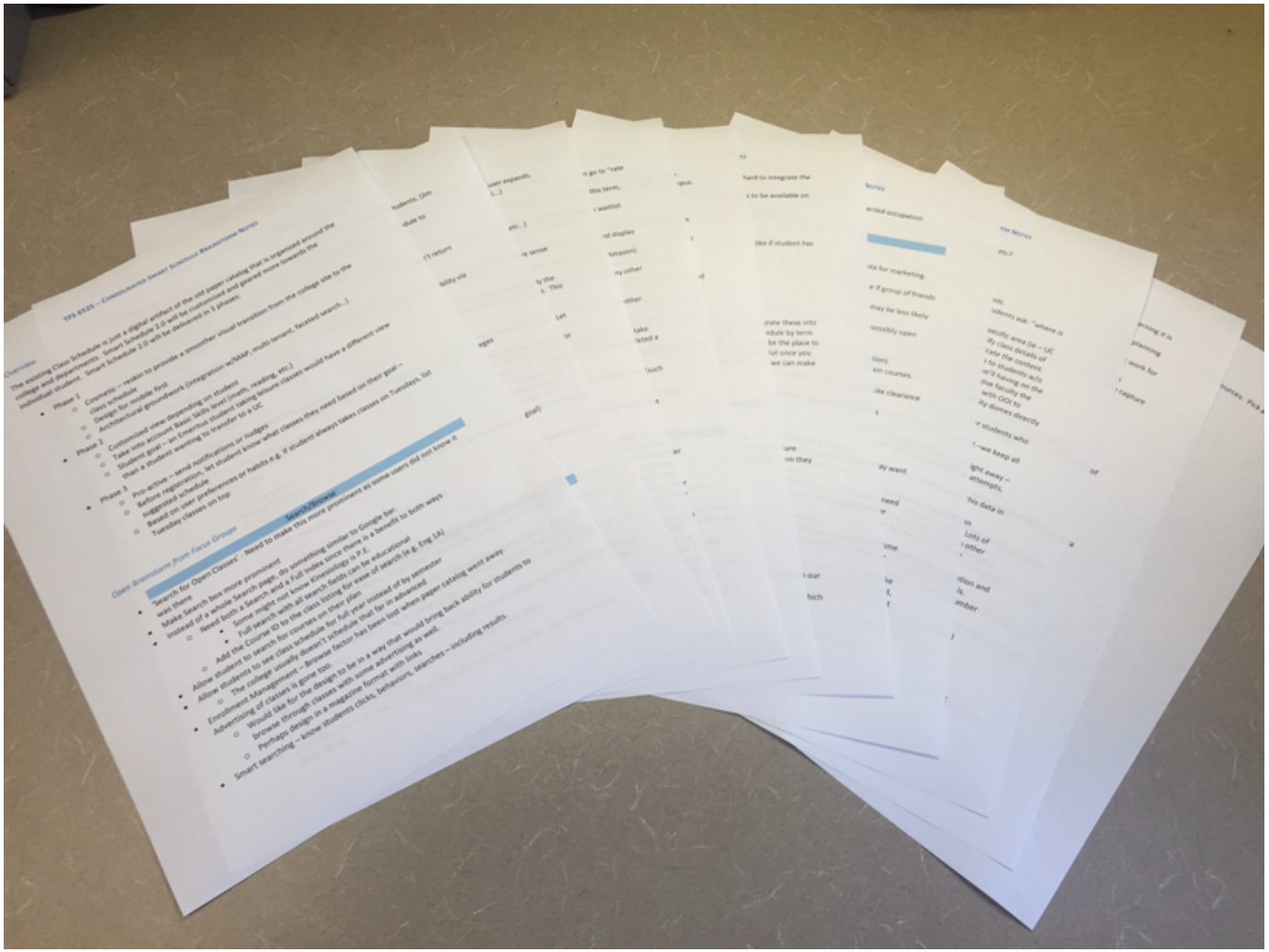
- Index vs. Search
- Summary vs. Detail
- Generic vs. Customized
- Aggregation
- Terminology
- Sorting
- The Power of the Default

Why is this important?

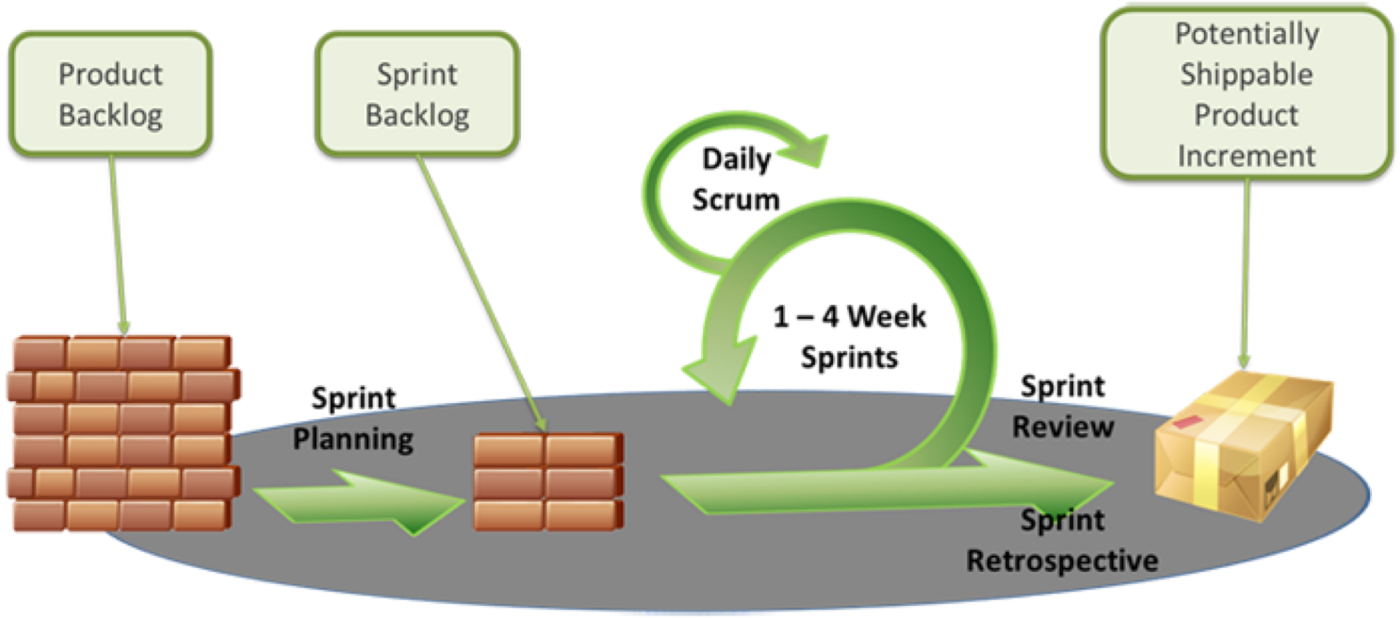
Design Process



Faculty/Staff Brainstorming Sessions



Development Process



What do the students need?

Student Review of Class Schedules

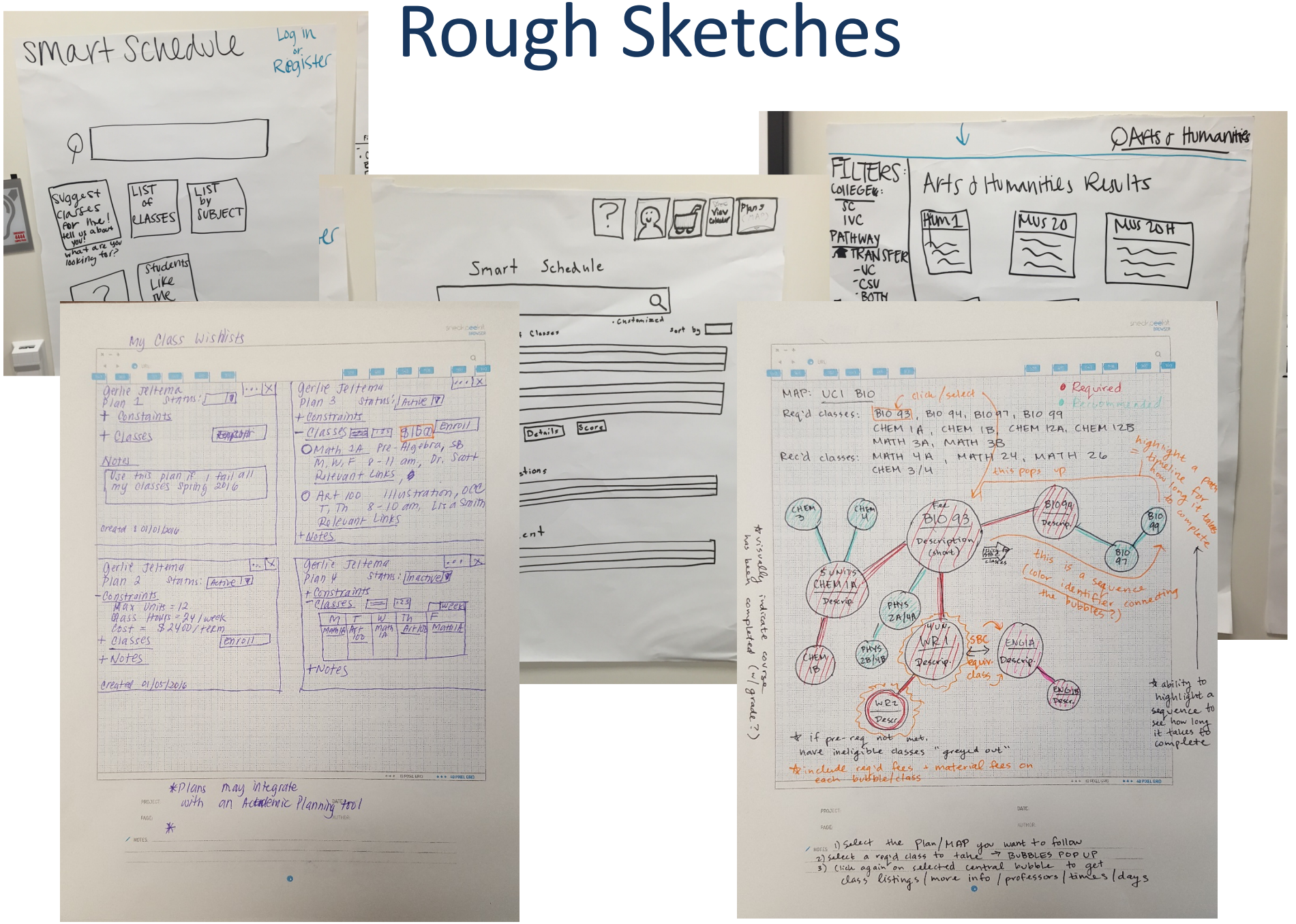
	A	B	C	D	E	F	G	H	I	
1	Date Started	Evaluator	College	Schedule	Functional Rating	Functionality Comments	UI Ratin	UI comments	Total Score	Com
2	6/15/2015	SaraÃ- J. SantamarÃ-a	Monterey Peninsula College	https://webreg.mpc.edu/SR_ScheduleOfClasses.	10	It was very clear how to register for courses. Course information included transferability and recommended preparation. There is a book link beside each course.	10	I really enjoyed exploring the different methods for searching/viewing courses. My favorite was probably the Tree View. Students can select a term, then the first letter of the discipline, and then see courses listed under that discipline.	20	This ones surp as In
3	3/27/2015	Melissa Boomer	City College of San Francisico	www.ccsf.edu	10	the class schedule was on the home page. once you clicked on that there were sub catagories w/ eening,late,online,sat classes for each semester. Ir was easy to find an open class and understand.	10	the class schedule is interactive with book info, and ada (american diabilities act) tells you that the class can access a wheelchair.I liked how the info is broken down in different colors as well.	20	
4	3/27/2015	Melissa Boomer	American River College	www.arc.losrios.edu	9	link to class schedule o home page. very easy to find. Once you click on class schedule, there is content page, you can click on whcih sememster you are intersted in as well as final eaxam dates/times and archived schedules. very functional and easy to use.	10	easy to use, find classes and navigate. Included in description was a book link. Long class description with prereq, info.	19	
5	6/4/2015	Ryan Mathis	Antelope Valley College	http://www.avc.edu/information/schedule/	9	The class schedule system ran smoothly and there were no problems finding classes.	10	AVC has a great class schedule system that is straight forward and easy to use.	19	I wo look
6	6/8/2015	Ryan Mathis	Berkley City College	https://passport2.peralta.edu/psp/EPAPROD/EM	9	This is the most fluid system I have seen yet. It operates smoothly, was easy to find, and provides me with classes every time I search.	10	Incredibly easy to understand, awesome icon legend system: indicates waitlist/closed/open status of classes. I didn't even need to choose a class for a sustainable search, just the semester selected returned every class for that semester.	19	Wha
7	6/11/2015	Ryan Mathis	CaÃ±ada College	https://webschedule.smccd.edu/default.php	10	I had zero problems with the functionality. I think it is the best class schedule search system I have seen so far. The search engine was really fast. An 'expand class listing length' button was also helpful. Also an advanced search tab has been implemented for more narrow searching.	9	Extremely easy to use. Very helpful legend that a untrained person can easily understand. If I just wanted to see all the classes for the fall, that was possible by filling out only one field. Two different search buttons: one for 'all' classes' and the other for 'open' classes, allowing for a quick and informative way to view classes. Very intuitive. The only reason I gave it a 9 was because the URL given above was semi-difficult to find.	19	Fron is or cata CaÃ;

UserResponses

Student Design Team Retreat

Breakout Sessions

Rough Sketches



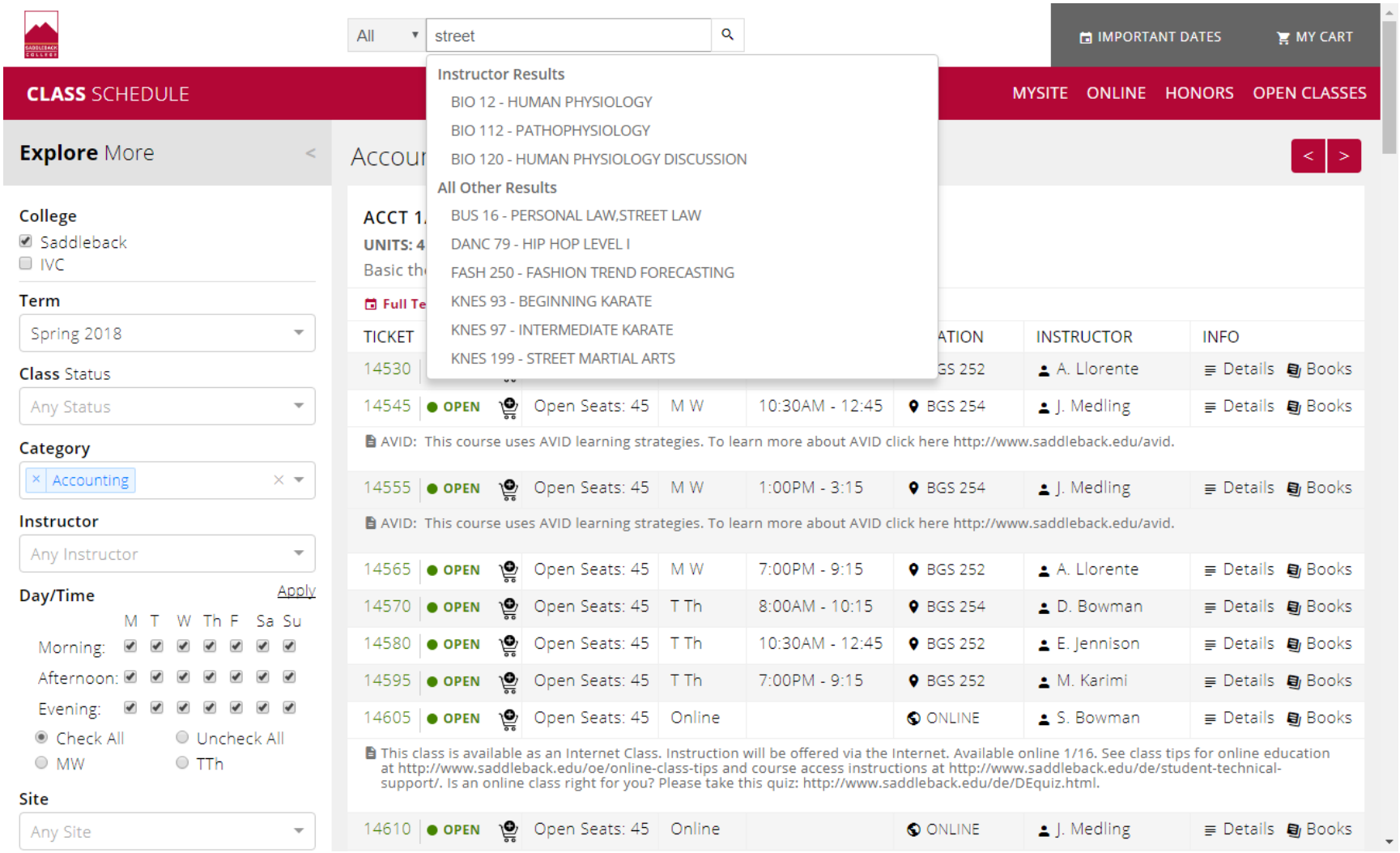
Persona Based Design

- Olivia the Overachiever
- Uri the Undecided
- Abby the Adult Learner
- Ed the Emeritus Student
- Ivan the International Student
- Harry the High School Student

SmartSchedule Phases

- Phase 1 Complete
  - UX upgrade
  - College branding
  - Mobile responsive
  - Architectural Foundation for Phase 2
- Phase 2 Complete
  - Entirely new infrastructure
  - User Interface Enhancements
  - Allow colleges to easily change aggregation using index groups
  - Improved shopping cart
  - Global search with auto-suggest
  - Faceted search results with immediate refresh
- Phase 3 Going Live February 2019
  - New Landing Page
  - Schedule Builder with proactive recommendations from MAP

Phases 1 and 2 Demo

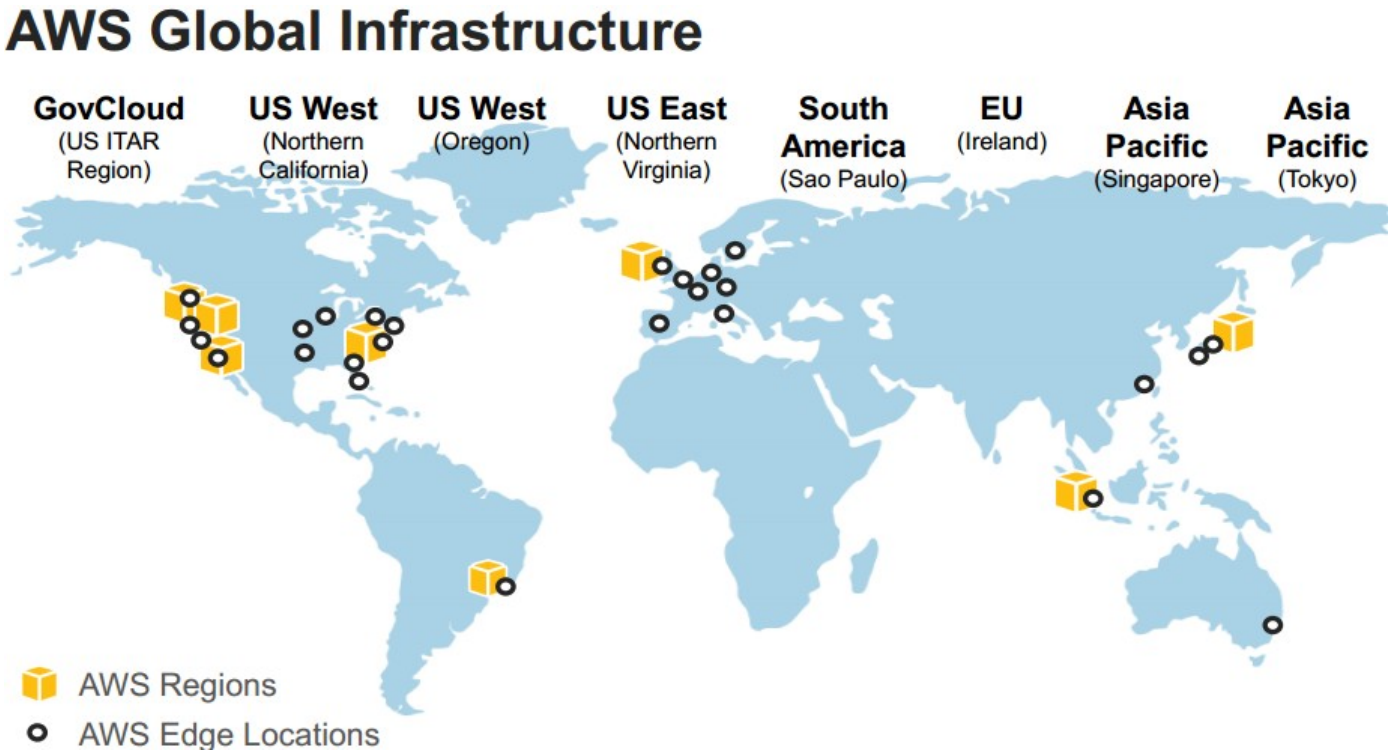


Infrastructure

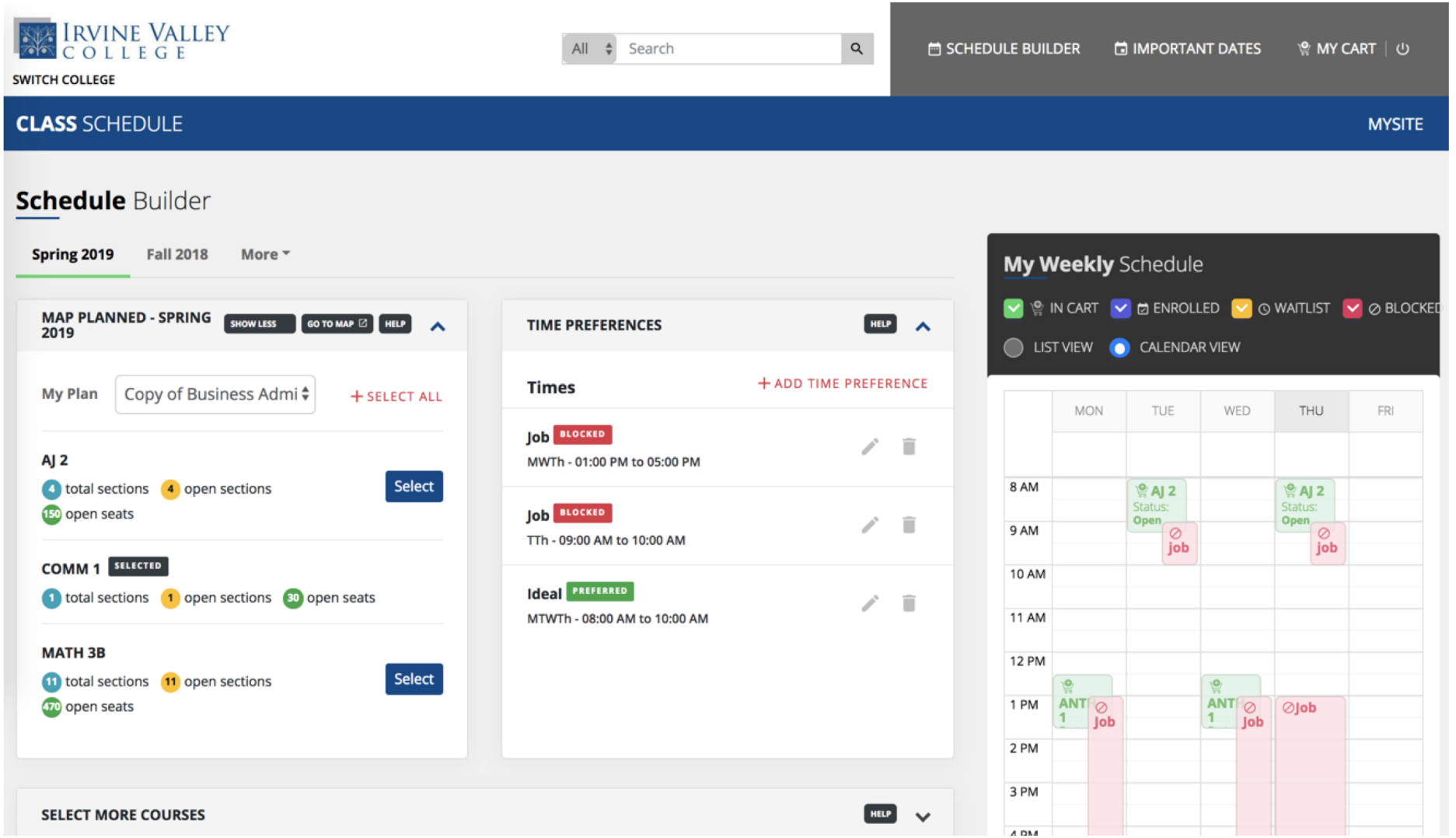
elasticsearch

©elastic.co

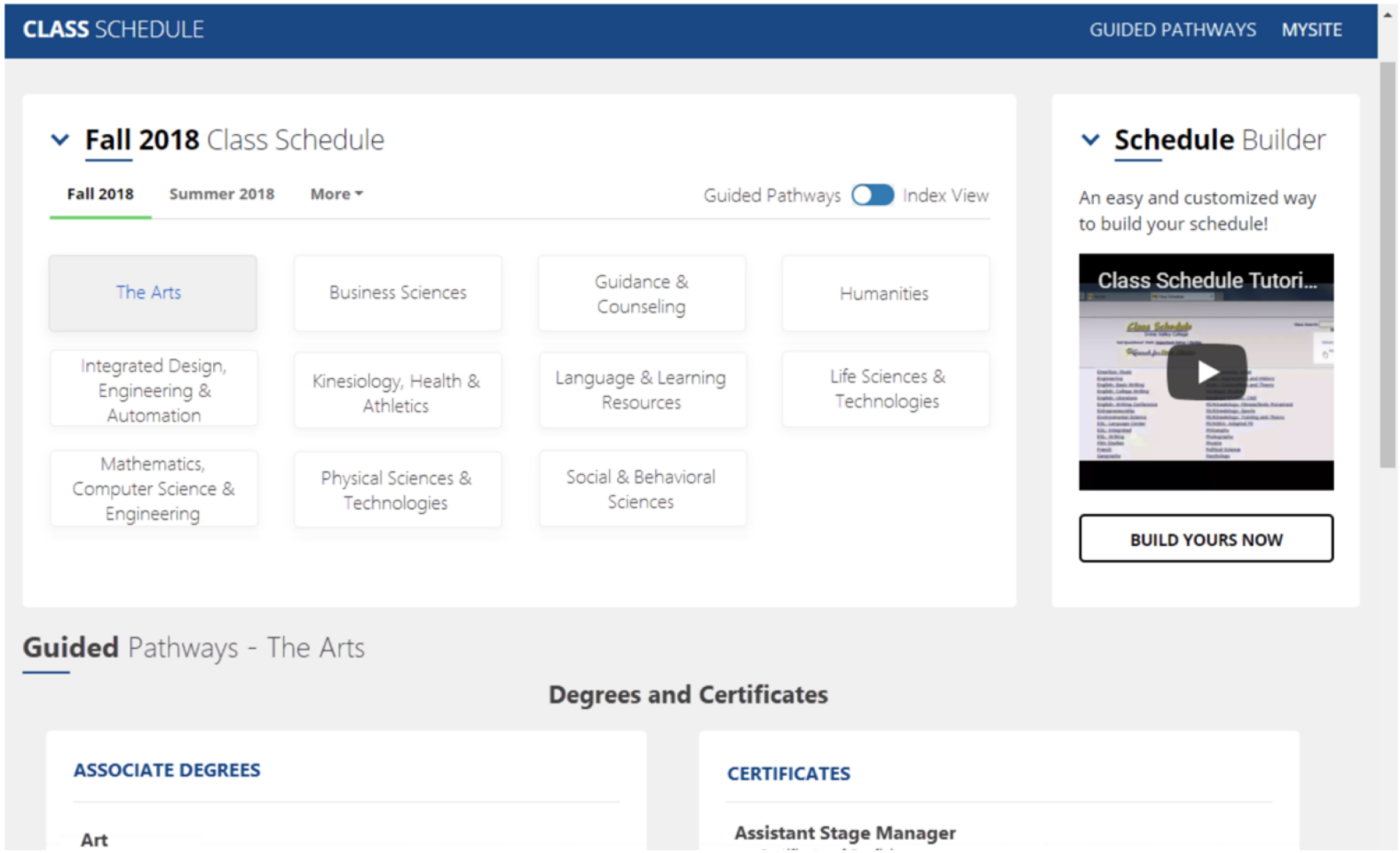
React



Phase 3 Demo


IRVINE VALLEY COLLEGE
SWITCH COLLEGE
All
Search
SCHEDULE BUILDER
IMPORTANT DATES
MY CART
CLASS SCHEDULE
MYSITE
Schedule Builder
Spring 2019
Fall 2018
More
MAP PLANNED - SPRING 2019
SHOW LESS
GO TO MAP
HELP
My Plan
Copy of Business Admi
+ SELECT ALL
AJ 2
4 total sections
4 open sections
150 open seats
Select
COMM 1
SELECTED
1 total sections
1 open sections
30 open seats
MATH 3B
11 total sections
11 open sections
470 open seats
Select
TIME PREFERENCES
HELP
Times
+ ADD TIME PREFERENCE
Job
BLOCKED
MWTh - 01:00 PM to 05:00 PM
Job
BLOCKED
TTh - 09:00 AM to 10:00 AM
Ideal
PREFERRED
MTWTh - 08:00 AM to 10:00 AM
SELECT MORE COURSES
HELP
My Weekly Schedule
IN CART
ENROLLED
WAITLIST
BLOCKED
LIST VIEW
CALENDAR VIEW
MON
TUE
WED
THU
FRI
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
AJ 2
Status: Open
job
ANT 1
Job

Guided Pathways



What's Next?

- Complete Phase 3 (February 2019)
- Scale Up for Other Colleges

Questions?

Robert Bramucci: rbramucci@socccd.edu

Jim Gaston: jgaston@socccd.edu