BCNET

Shared IT Services for Higher Education & Research

Conference 2017

The Story of SFU's First Official Mobile App

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Introduction

Andrew Leung

Application Developer
IT Services

Ricardo Haro

iOS Developer (Co-op)
IT Services

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Senior Director
Digital Engagement
University Communications

SFU SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

The Official SFU App Suite

A-Z DIRECTORY SIGN IN Search This site SFU.ca

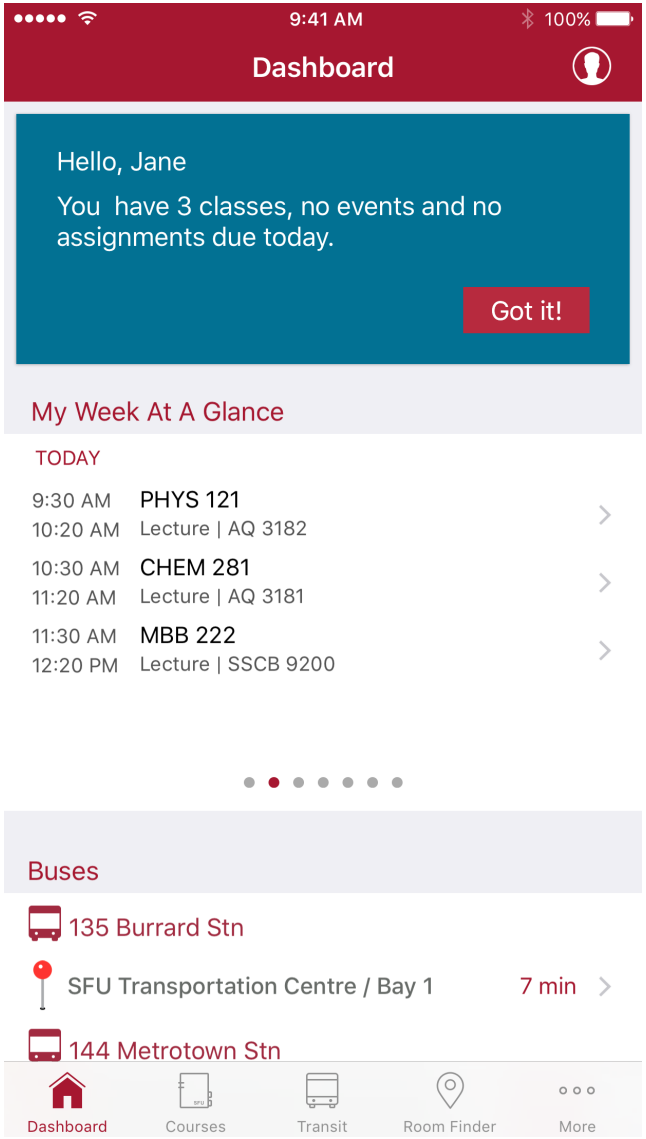
Mobile Universe

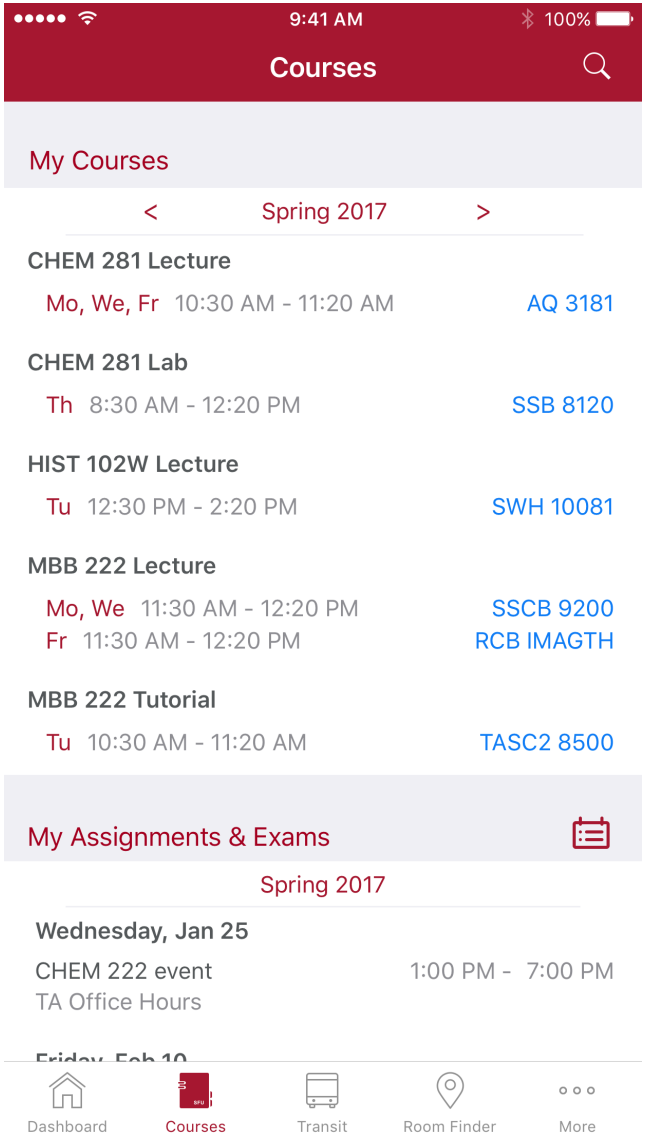
- **552**. Number of apps available in Apple's App Store in July 2008.
- **50**. Number of apps available in the Android Market in October 2008
- **2.2 million**. Number apps in Apple store as of January 2017
- **2.8 million.** Number of apps in Google Play as of January 2017

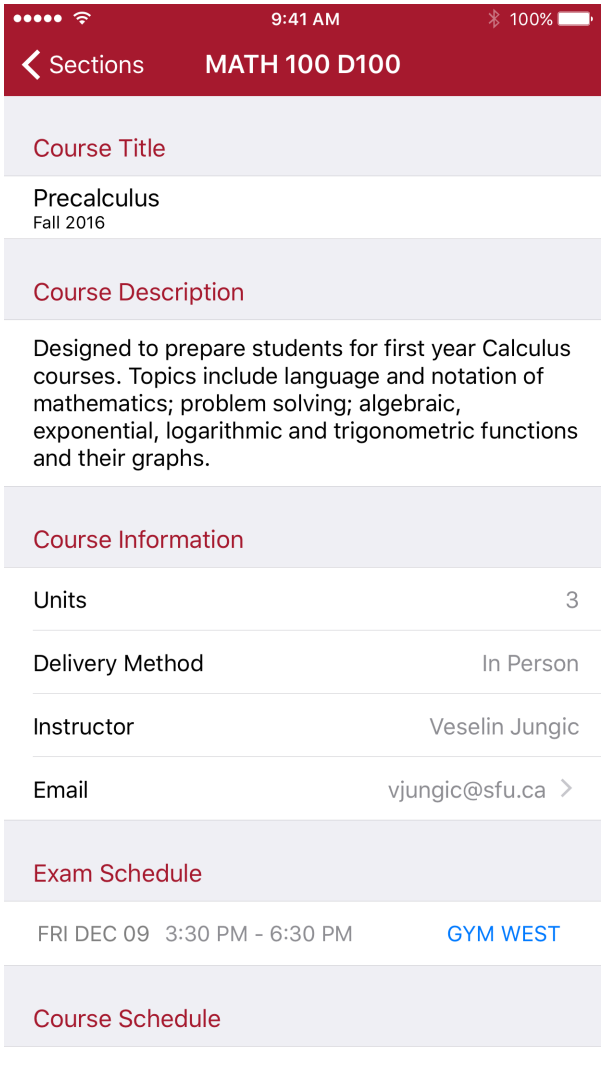
Mobile Apps in Higher Ed

- **90 %.** Approximate percentage of college students own a smart phone.
- **10 hours a day.** Time spent on mobile devices by female college students
- **8 hours a day.** Time spent on mobile devices by male college students

SFU snap


9:41 AM
100%
Dashboard
Hello, Jane
You have 3 classes, no events and no assignments due today.
Got it!
My Week At A Glance
TODAY
9:30 AM
10:20 AM
PHYS 121
Lecture | AQ 3182
10:30 AM
11:20 AM
CHEM 281
Lecture | AQ 3181
11:30 AM
12:20 PM
MBB 222
Lecture | SSCB 9200
Buses
135 Burrard Stn
SFU Transportation Centre / Bay 1
7 min
144 Metrotown Stn
Dashboard
Courses
Transit
Room Finder
More


9:41 AM
100%
Courses
My Courses
< Spring 2017 >
CHEM 281 Lecture
Mo, We, Fr 10:30 AM - 11:20 AM
AQ 3181
CHEM 281 Lab
Th 8:30 AM - 12:20 PM
SSB 8120
HIST 102W Lecture
Tu 12:30 PM - 2:20 PM
SWH 10081
MBB 222 Lecture
Mo, We 11:30 AM - 12:20 PM
SSCB 9200
Fr 11:30 AM - 12:20 PM
RCB IMAGTH
MBB 222 Tutorial
Tu 10:30 AM - 11:20 AM
TASC2 8500
My Assignments & Exams
Spring 2017
Wednesday, Jan 25
CHEM 222 event
TA Office Hours
1:00 PM - 7:00 PM
Dashboard
Courses
Transit
Room Finder
More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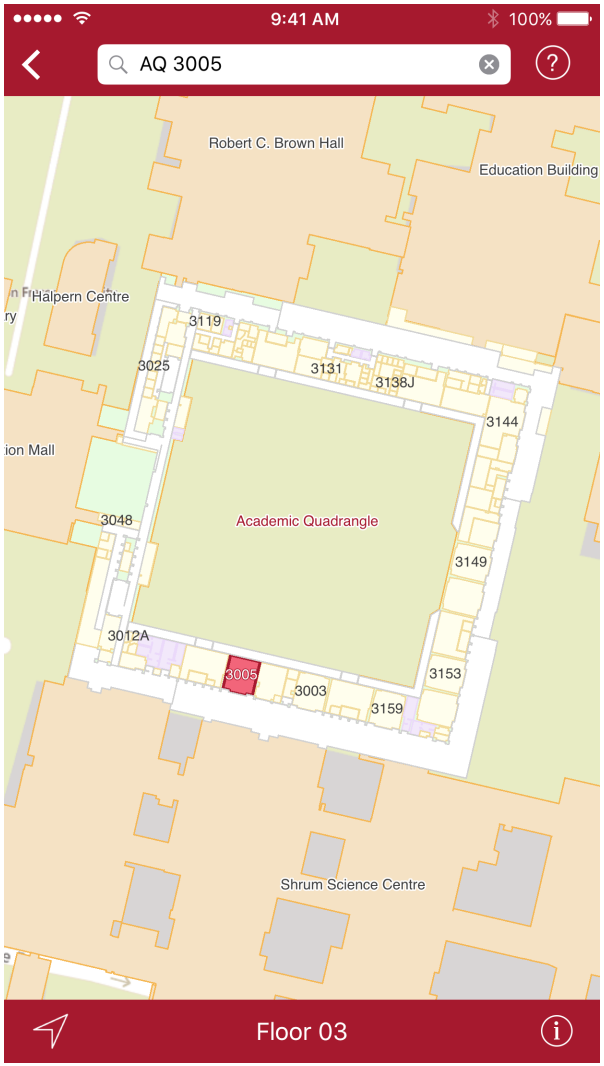
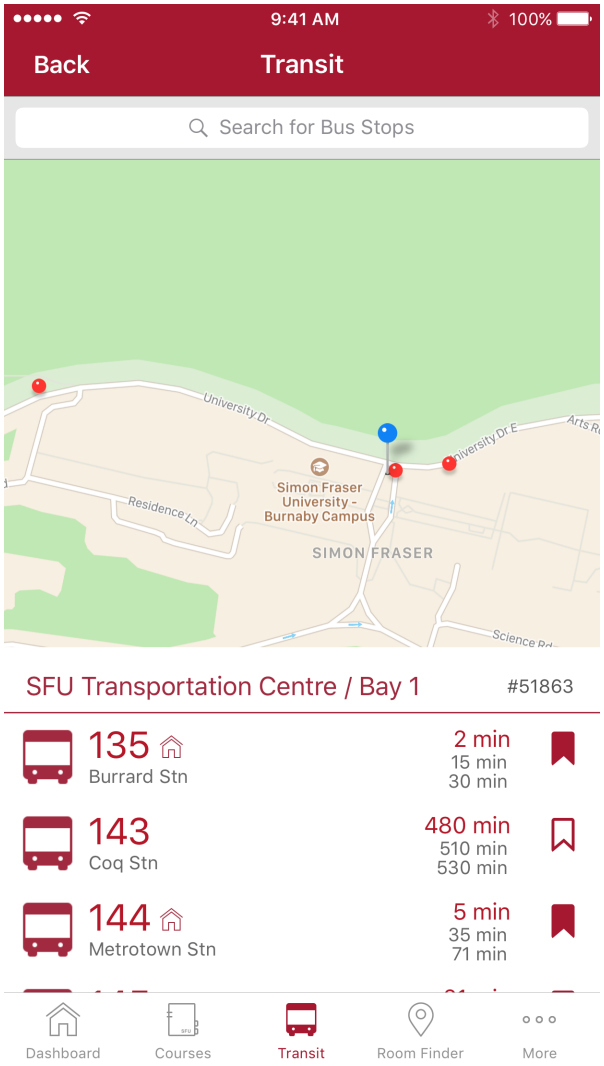
Sections
MATH 100 D100
Course Title
Precalculus
Fall 2016
Course Description
Designed to prepare students for first year Calculus courses. Topics include language and notation of mathematics; problem solving; algebraic, exponential, logarithmic and trigonometric functions and their graphs.
Course Information
Units 3
Delivery Method In Person
Instructor Veselin Jungic
Email vjungic@sfu.ca
Exam Schedule
FRI DEC 09 3:30 PM - 6:30 PM GYM WEST
Course Schedule


9:41 AM
100%
AQ 3005
Robert C. Brown Hall
Education Building
Halpern Centre
3119
3025
3131
3138J
3144
Academic Quadrangle
3048
3149
3012A
3005
3003
3153
3159
Shrum Science Centre
Floor 03


9:41 AM
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Back
Transit
Search for Bus Stops
University Dr
Simon Fraser University - Burnaby Campus
Residence Ln
SIMON FRASER
SFU Transportation Centre / Bay 1
#51863
135
Burrard Stn
2 min
15 min
30 min
143
Coq Stn
480 min
510 min
530 min
144
Metrotown Stn
5 min
35 min
71 min
Dashboard
Courses
Transit
Room Finder
More

Previous Landscape

A Student's Perspective

- First interaction with SFU
- A collage of systems
- Cognitive Overhead
- Core principle of SFU Snap
  - Reduce cognitive effort
  - Free mental resources

Previous Landscape

- Existing web applications designed for the desktop (and maybe "mobile second")
- Variety of third-party mobile apps
  - Branding
  - Consistency
  - Security issues

CS Student Project

The Project & competition

- CMPT 275 – A milestone course
- Ancillary Services Sponsorship
- Summer placement for top designers/developers

CS Student Project

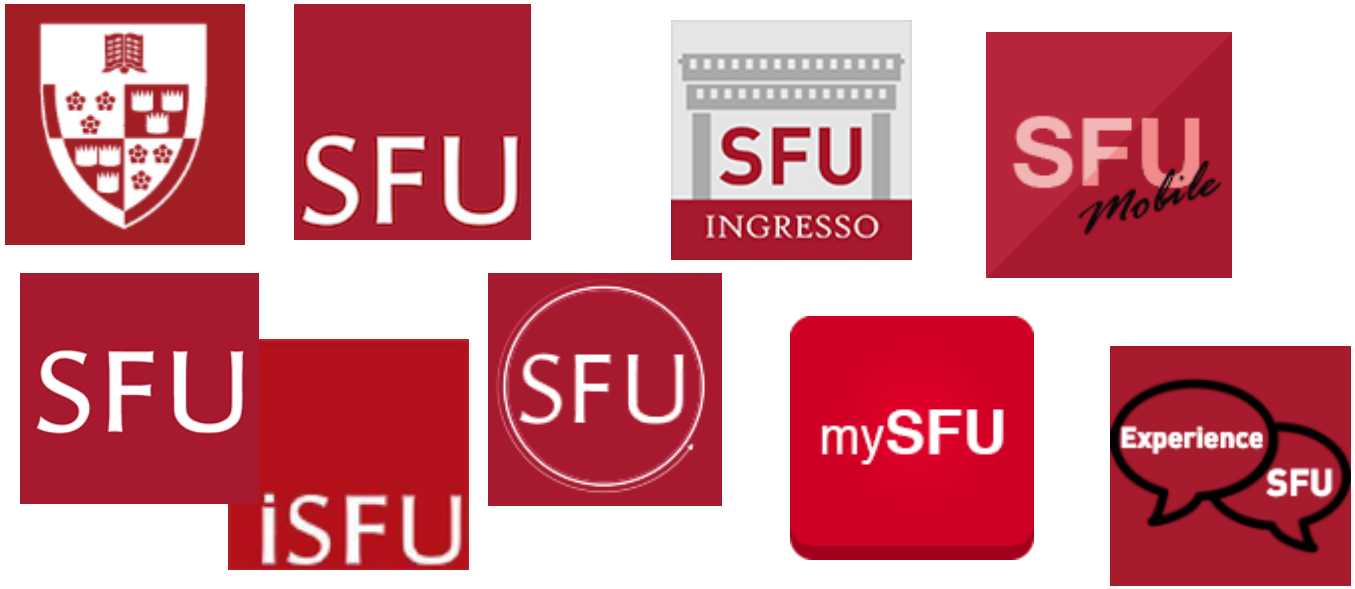
The Process

- Requirements Gathering
- Data Requirements
- Student Acceptance Testing

CS Student Project

The Outcome

- 75 students - 15 apps
- Demo to sponsors
- A myriad of features and implementations



CS Student Project

The Outcome

- A group of 7 students ready to consummate the project into SFU's first official app

Mobile Strategy @ SFU

- User are mobile
- They want access to information systems anytime, anywhere, and with any device they choose

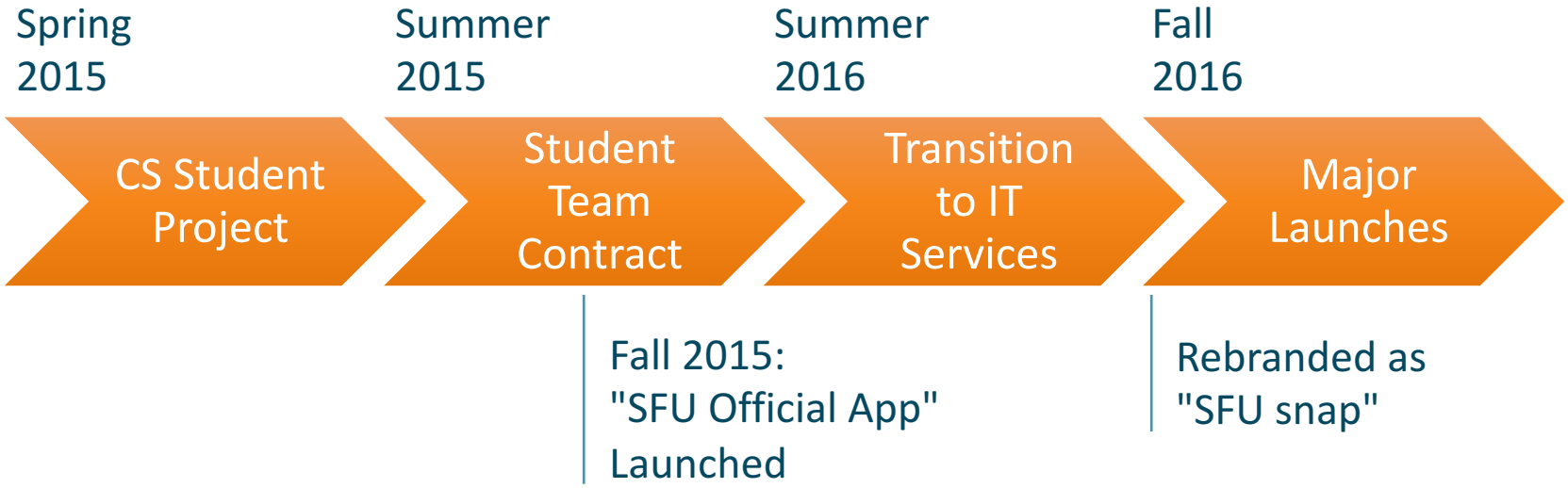
Mobile Strategy @ SFU

- Mobile First
- Provide a consistent and seamless mobile application experience
- Ensure a secure, private, and compliant mobile experience

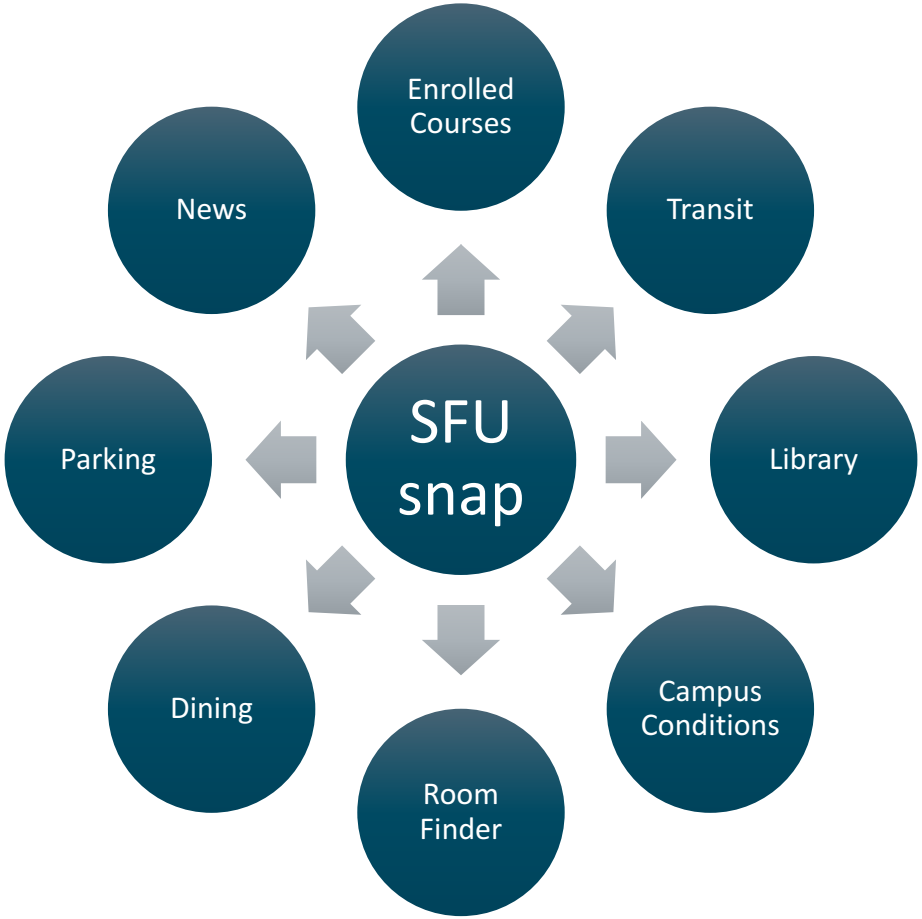
Collaboration

- Ancillary Services
  - Championed the app at the beginning
- Facilities Services
  - Room Finder data and mapping expertise
- IT Services
  - Workspace, resources, technical guidance

Evolution: Project to Product

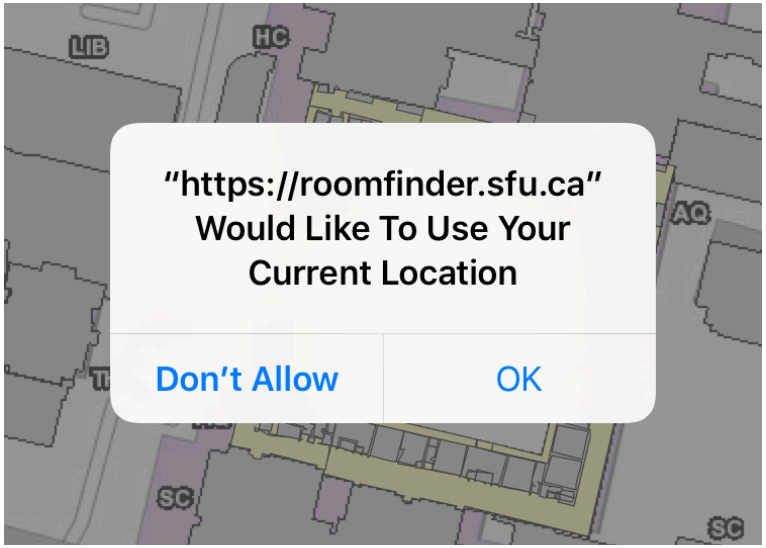


App Features



Evolution Details

- Native Room Finder
  - Improved performance
  - Eliminated extra permission dialogs



Evolution Details

- User authentication
  - Enables personalized data
  - Persistent session without storing passwords
- Integration with Canvas
  - Unified view of events
  - Deep-linking to the Canvas mobile app
- User Acceptance Testing
  - Invited students to participate in testing

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SFU snap
go SFU
SFU vault
canvas
W.A.C. BENNETT
STUDENT LEARNING COMMONS
Ask us
Happy Anniversary

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SFU vault

Total Lifetime Installs

12.8k

iOS

1.5k

Android

Monthly Users (as of March 2017)

3.1k

iOS

620

Android

Where we want to go?

- Add wayfinding to the Room Finder
- Enhance push notifications / message centre
- Integration with:
  - Enrollment and course management
  - Email
  - Parking
  - Athletics and recreation
- Student-driven development

Lessons Learned

- Importance of providing consistent data standards
- Commit resources needed to support development
- Mobile is a crucial part of student engagement
- Students demand mobile access of their data
- Launching with MVP to learn from users

Lessons Learned

- Collaboration across the University
- Putting the needs of audience first
- Think about Governance, but don't let it get in the way

Build vs Buy?

- Building the app was right for us. But is it right for you?
- One size does not fit all
- App as a platform for evolution
- Treat mobile as a strategic asset of the university not as a cost centre

Questions and Discussions