

# Simplifying Classroom Attendance

by Ex Libris campusM

# Why Mobile?

*"It is **easier to communicate** with fellow colleagues that are within your course. It is an effective method of team and group work."*

*"It connects me to people across the world and gives me a platform to express opinions."*

*"It really helps to have a free messaging app that keeps me connected to my family and friends, **no matter where they are and what device they use.**"*

*"I use it all the time, it allows me to communicate with my friends easily and to show them bits of my life that I **couldn't show them with text messages only**"*

*"It is entertaining (watching videos, sharing photos) and **educational** (reading articles)."*

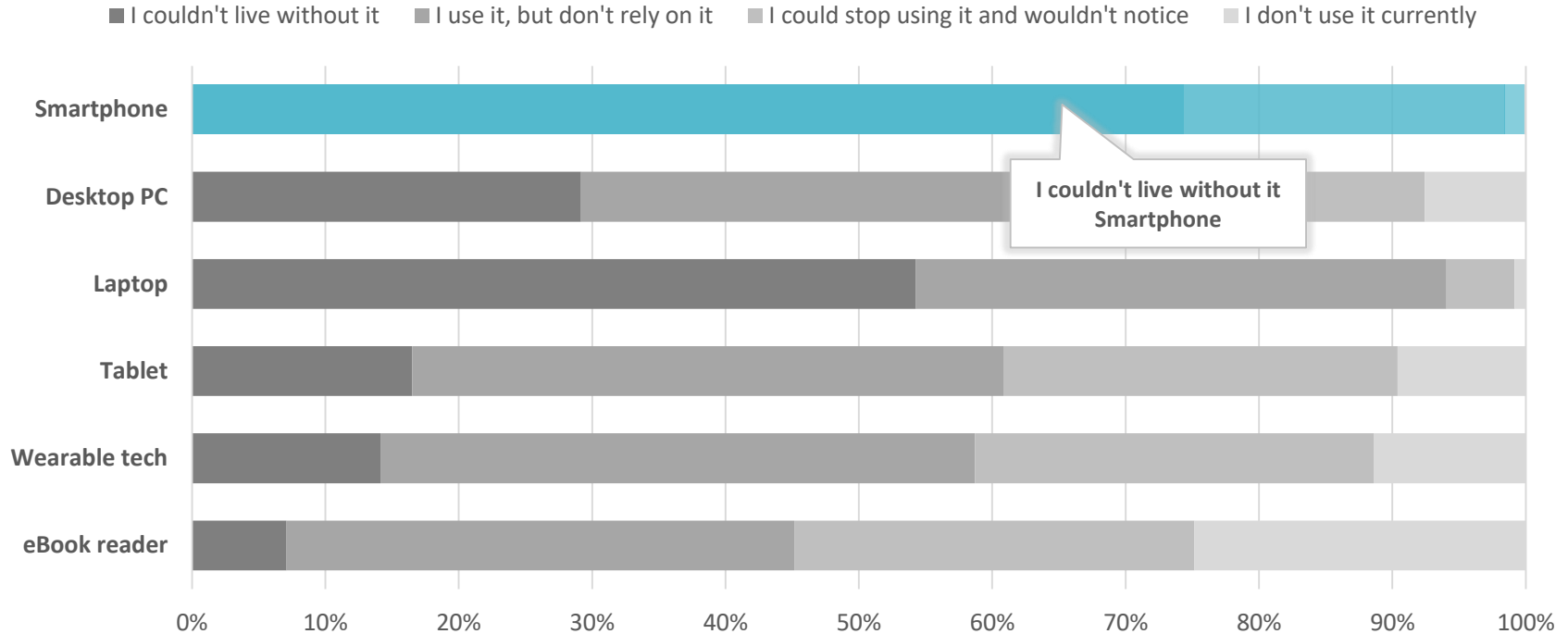


*"It's fun and a good way to connect with friends. The new filters have improved it massively and made it an **exciting app to use.**"*

*"It allows me to **keep in touch with** friends and see what they're up to and also let other people know what I'm up to."*

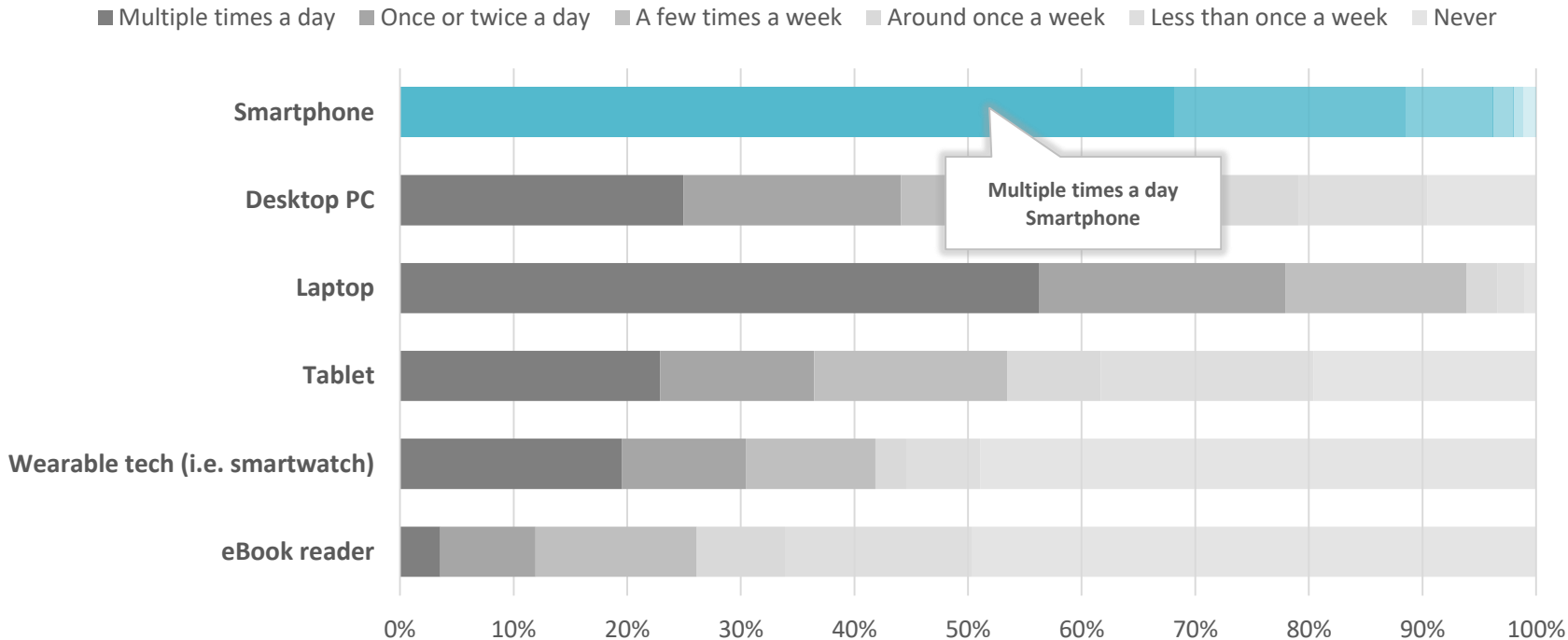
*"I can browse through photos of the people I follow and **get inspiration** for new places to go and new food dishes to try/cook."*

# Engage Students Where They Are (on the go)



Understanding the Digital Lives of University Students, campusM and Alterline Market Research, 2017 Edition

# How Often Do You Use These Devices for University?



Understanding the Digital Lives of University Students, campusM and Alterline Market Research, 2017 Edition

# Ex Libris campusM



## CONSOLIDATED

one interface supporting campus wide solutions



## PERSONALIZED

info-at-a-glance based on your individual roles



## INTEGRATED

out-of-the-box and custom developed services



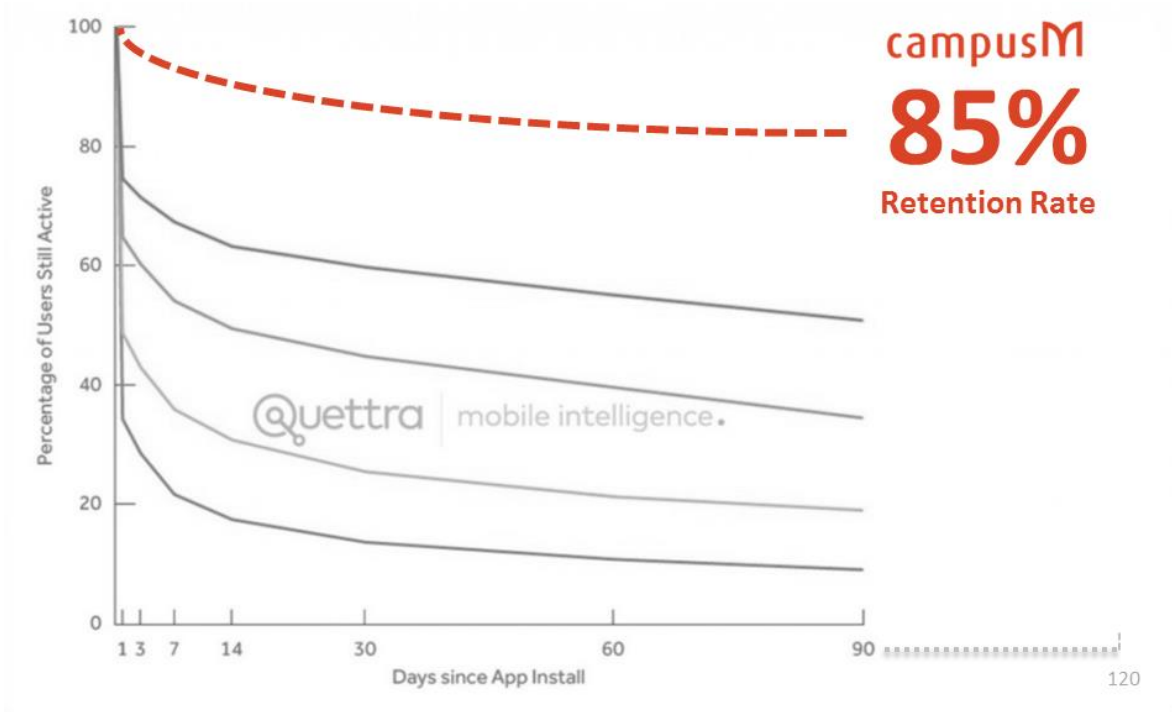
## ACCESSIBLE

consistent experience across devices

# Providing Academic & Social Functions in One App



# Increase Focus on App Usage Retention



<http://andrewchen.co/new-data-shows-why-losing-80-of-your-mobile-users-is-normal-and-that-the-best-apps-do-much-better/>

# How to Further Make the University App Part of the Student Day-to-day Life

## NEW CAMPUS SERVICES

Provide additional services used by students to increase user interactions

## NEW MOBILE FEATURES

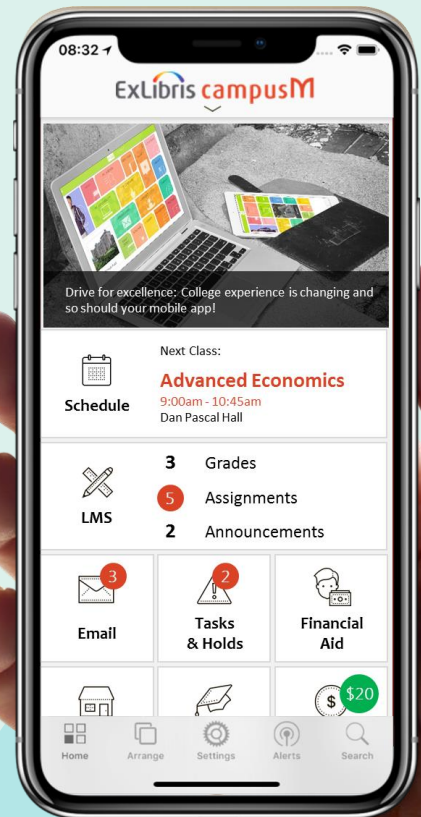
Deliver new mobile-driven functions to increase product usefulness

## ONGOING ENGAGEMENT

Leverage mobile technology to increase meaningful communications on campus

## PUSH NOTIFICATIONS

Send personalized and general information across a direct channel



# Why Attendance?



## STUDENT SUCCESS

Clear, well documented link between **high attendance and student success**

Student success is intrinsically linked to **institutional ranking** and **student satisfaction**, key KPIs for HEI



## REGULATIONS COMPLIANCE

Global interest in validating attendance for a range of **federal and funding compliance**

Linked to **professional 'Fitness to Practice'** requirements for a range of subject areas (Medicine, Engineering)



## STRATEGIC PLANNING

Insight into attendance enables HEIs to **undertake resource and strategic planning**, indicating areas for investment and disinvestment

# Navigating the Complex Attendance Processes



## STUDENTS

Required to have their attendance recorded

- Inconsistent between classes
- Manual and error-prone process
- Hard to review, comments or change



## LECTURERS

Required to take attendance of groups or all students

- Processes requires ongoing efforts
- Minimize classroom disruption



## ADMIN

Required to comply with regional regulations

- Inconsistent, manual processes
- Additional technology dependency























## SENIOR OFFICERS

Tracking institutional KPI and student surveys

- Risk of non-compliance
- Visibility to attendance metrics
- Impact on student related initiatives

**Impact on: Compliance, Satisfaction, Institutional Efficiency**

# Attendance Landscape: Current Status

	AFFORDABLE	EASY TO IMPLEMENT	EASY TO MAINTAIN	CLASSROOM	ADMIN
Swipe Cards					
Paper Register					
Biometrics					
Dedicated Apps					



- Full Support



- Partial Support



- Minimal Support

# Attendance Landscape: Current Challenges



**INFRASTRUCTURE  
REQUIREMENTS**



**INITIAL AND  
ONGOING COSTS**



**DATA LATENCY**



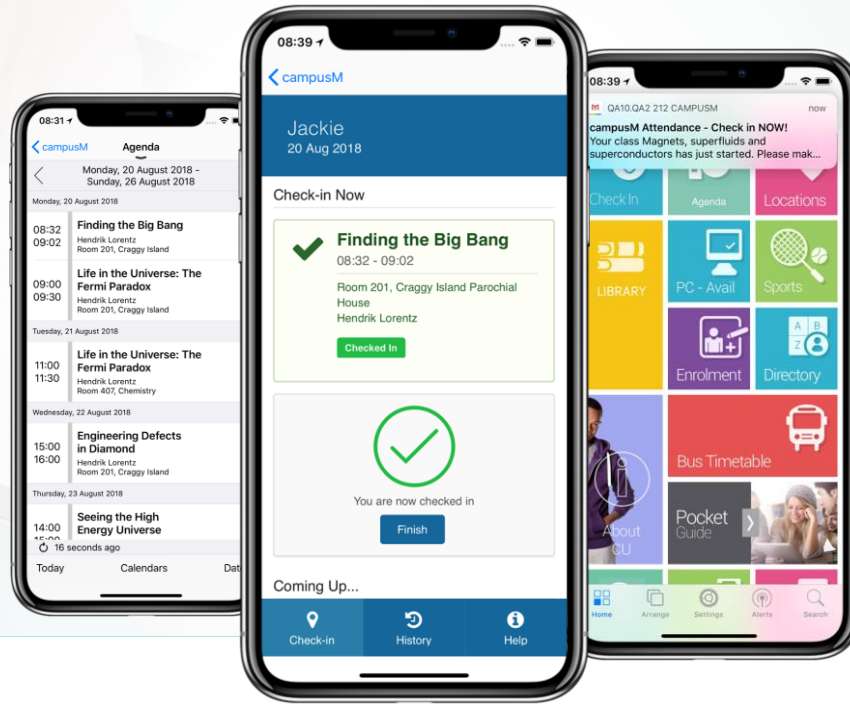
**ADMIN OVERHEAD**



**CLASSROOM LOGISTICS**



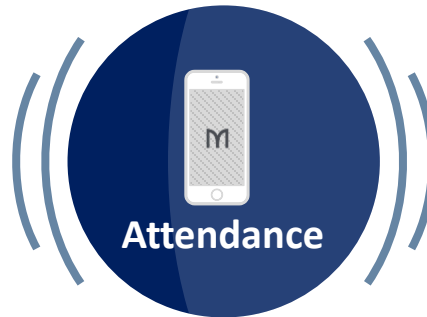
**END-TO-END SOLUTION**



# campusM Attendance

## simplifying classroom attendance tracking

A **complete solution** for tracking user's attendance while allowing the university to **comply with local regulations** and leverage insightful analytics to **deliver constructive intervention** for student success and engagement initiatives.



# campusM Attendance - Goals



## **SIMPLE PROCESS**

Real-time  
deployment

Highly Configurable

No hardware or equipment  
installation

Minimal classroom disruption



## **CONNECTED EXPERIENCE**

Works off any device

Part of the main university app

Connected to the Student  
Information System

Used by all university  
stakeholders



## **MINIMIZING COSTS**

Included in your campusM  
subscription

One-time implementation fee

Minimal ongoing maintenance

# Core Principles - Guidelines

## SIMPLE

- No hardware or equipment installation
- Works off any device
- Part of the main university app

## CONNECTED

- Already part of campusM
- Connected to the Student Information System
- Used by all university stakeholders

## AFFORDABLE

- Minimal initial and ongoing costs
- Subscription and one-time implementation fees

## EXTENDABLE

- Initial self-registration and one time code validation methods
- Extendable architecture to ensure support for additional current and future technologies

# Workflow Overview



## Reminder

Student receives reminder notification about upcoming classes

## Check-in

Student triggers a check in using the campusM app interface

## Validation

campusM uses the technologies available to validate the check-in

## Upload

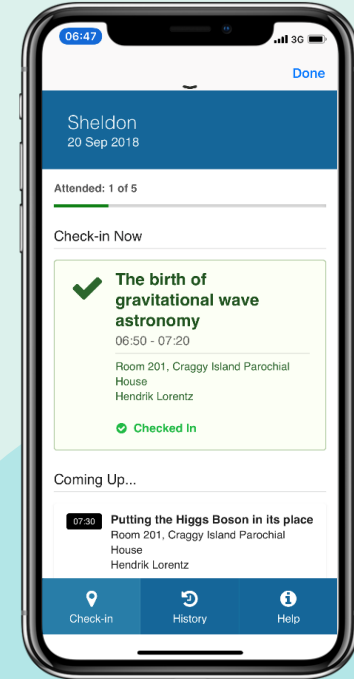
Check-in is uploaded to the cloud when the student is online

## Extract

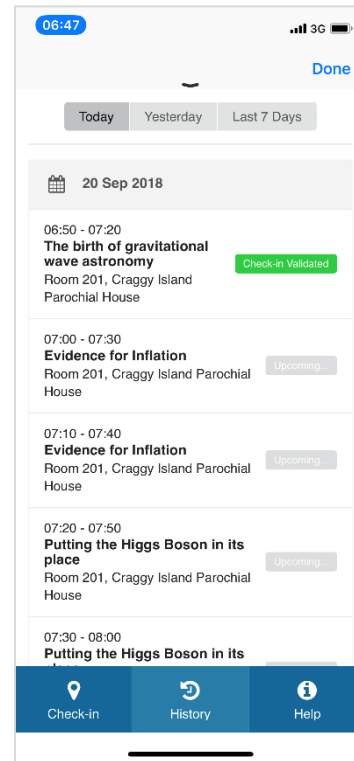
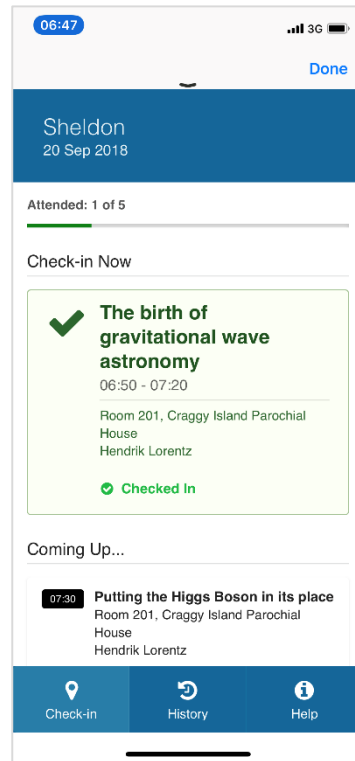
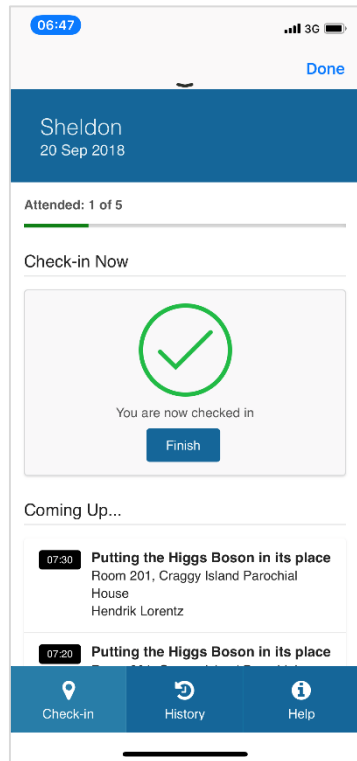
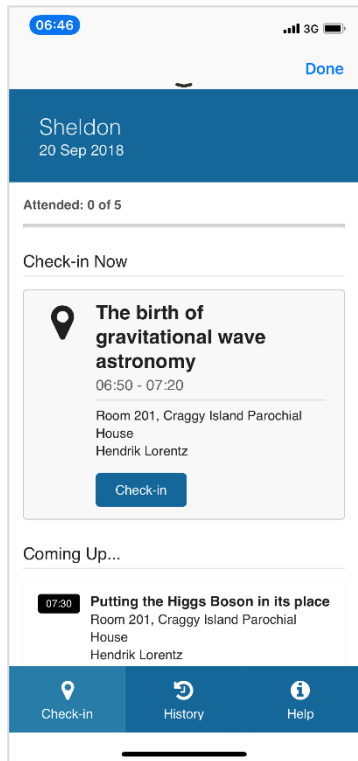
Customers extract check-in data using APIs, or view aggregated through OBI

# Student Experience

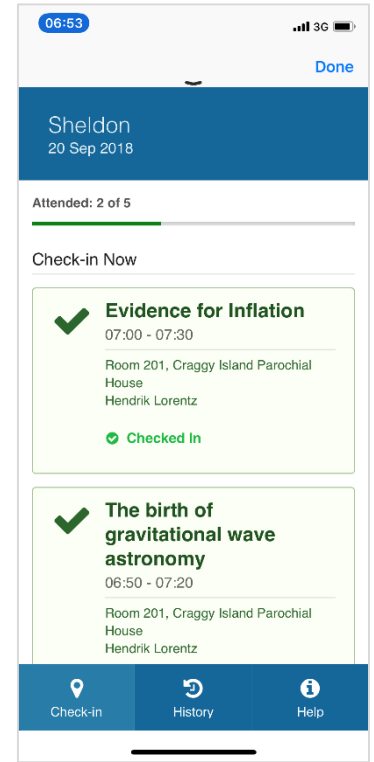
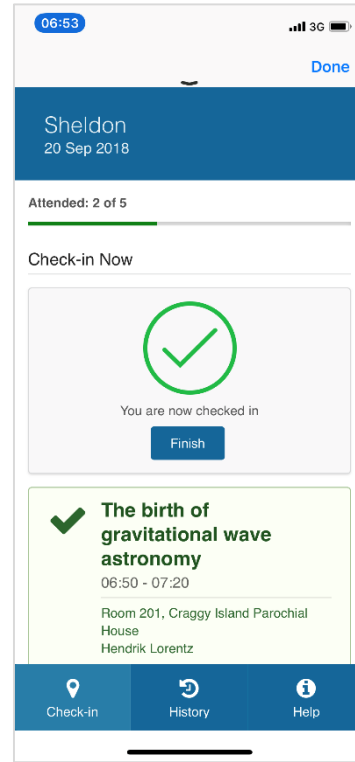
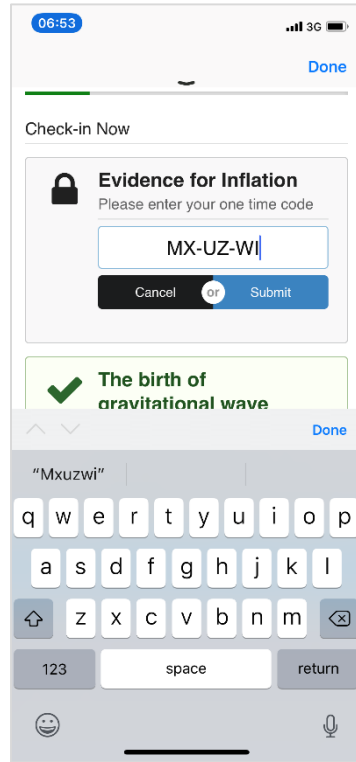
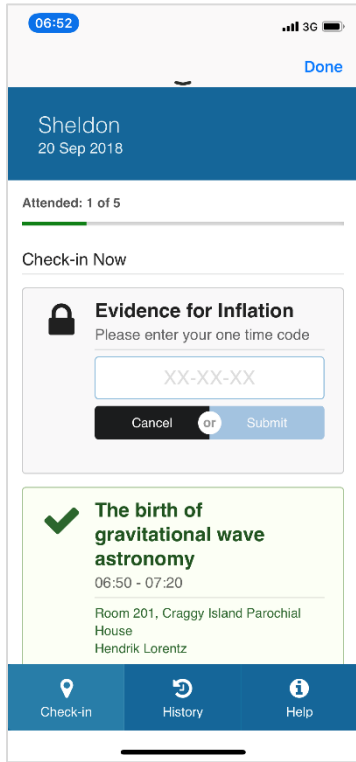
- Receives upcoming class notification
- Enters provided one-time event code (optional)
- campusM to validate code for class and confirm check-in (can be done offline)
- Receives confirmation notification
- Tracks attendance using personal dashboard



# Student UX

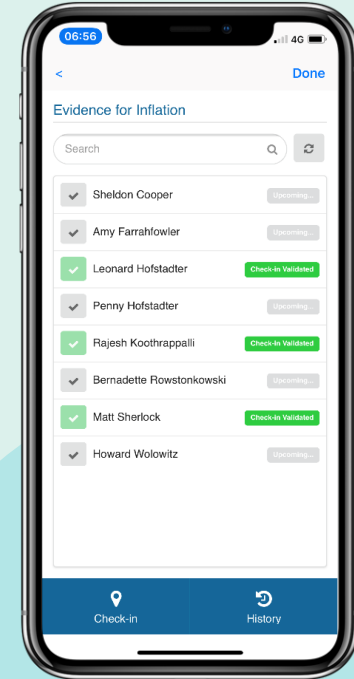


# Student UX

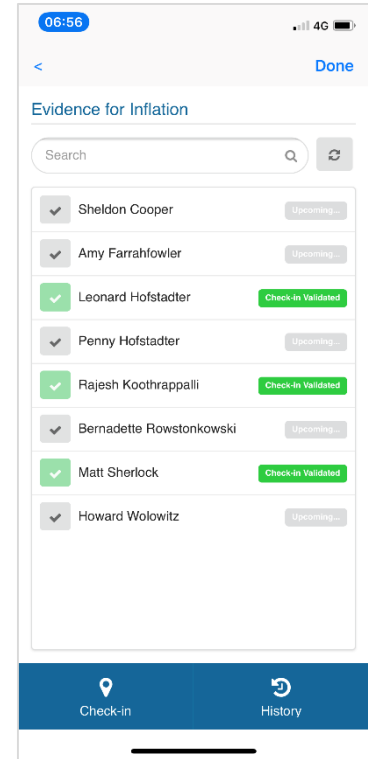
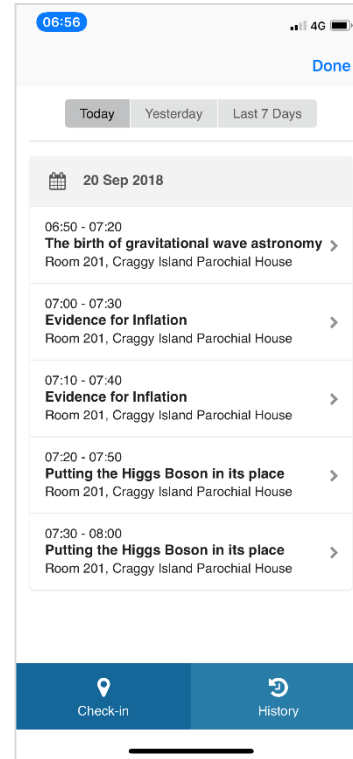
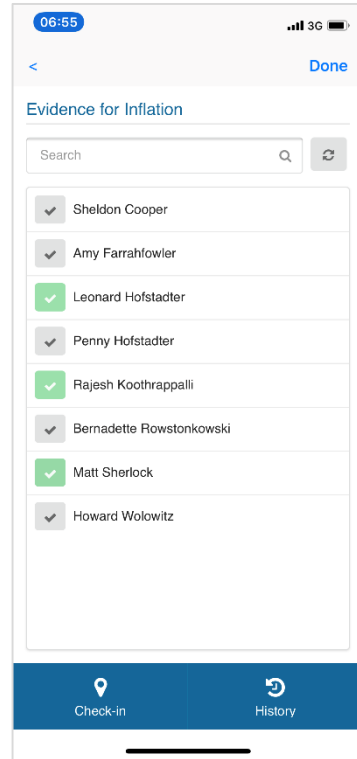
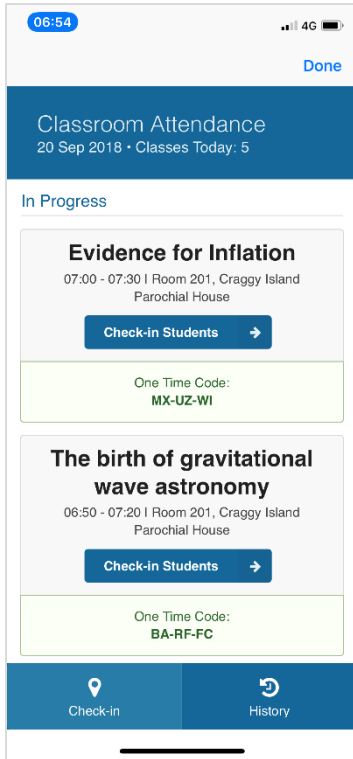


# Lecturer Experience

- Gets notification about upcoming class, including one-time event code
- Writes code on the board display code on projection screen
- Students use code for validation
- Lecturer dashboard updated in real time
- Lecturer can track their class and individual student using attendance dashboard



# Lecturer UX



# Admin Experience

- Attendance driven off of the class schedule so no requirement to set up class data
- Real-time dashboard tracking class attendance
- Data extraction providing attendance validation for localized compliance requirements
- Actionable insight enabling administrators and lecturers to take constructive intervention

Look and Feel

Primary Theme Color  
#9916d1

Secondary Theme Color  
#3de1e4

Student Check in Settings

Student Check in Window  
*When the student is allowed to check-in relative to the class start time*

Check in Window Start  
*Number of minutes before or after the start time*  
Default: -5

Enable Attendance

General

Look and Feel

Student Check in Settings

Lecturer Check in Settings

Homescreen

Check-in History Settings

Save Reset

# Web Based Configuration



## Check-in Window

Lorem ipsum dolor sit amet, consectetur.



## Roles

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## Notifications

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## User Interface

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## Validation Methods

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## Localization

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# Current Status of Development

	Feature	Function
<b>Trigger</b>	Native apps and web portal	Live Tile and Push notifications
<b>Validation</b>	Attendance capturing	One-Time Code, Self-Registration, GPS Geo-fencing
<b>Record</b>	Data export	Offline & Online functionality, Real-time API for data export
<b>Report</b>	Analytics	OBI-based Analytics

# Concrete Development Plan



## Capturing and Validation Methods

iBeacons  
Crowd Algorithm  
Web Services



## User Dashboards

Personal Student  
Lecturer  
Admin



## Enhanced Localization Support

UX Configuration  
Multilingual Support



## Engagement & Intervention

Activity Feeds  
Connected Notifications

# Development Roadmap

## Zero-touch Check-in

device driven check-ins requiring minimal student interaction.

## Ad-hoc Attendance Sessions

teaching sessions on the fly, capturing students on demand and in the field



## Validation

### Technologies

advanced technologies to enhance validation and simplify deployments.



## Absence Check-in

allow students to indicate they are unable to attend.



## Student Engagement

intervention and engagement features to support student retention



# LIVE DEMO

# campusM Attendance: Summary



## **SIMPLE TO USE**

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## **CONNECTED EXPERIENCE**

Works off any device

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Connected to the Student  
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Used by all university  
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## **COST EFFECTIVE**

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One-time implementation fee

Minimal ongoing maintenance