UniMingle: boosting student diversity
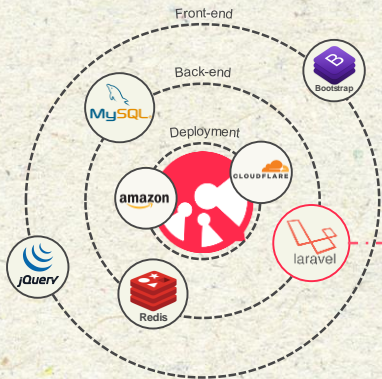
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➤ Introduction

• UniMingle is an event-based website aims at helping international students in UOA to communicate and have cultural exchange with others with various cultural backgrounds.

• Through this **exclusive cultural exchange platform for UOA students**, users can improve their life experiences and cultural diversity.

➤ Technology Kits

Front-end
Back-end
Deployment

Laravel is the core part of UniMingle as the website framework, and other kits help perfect functions.
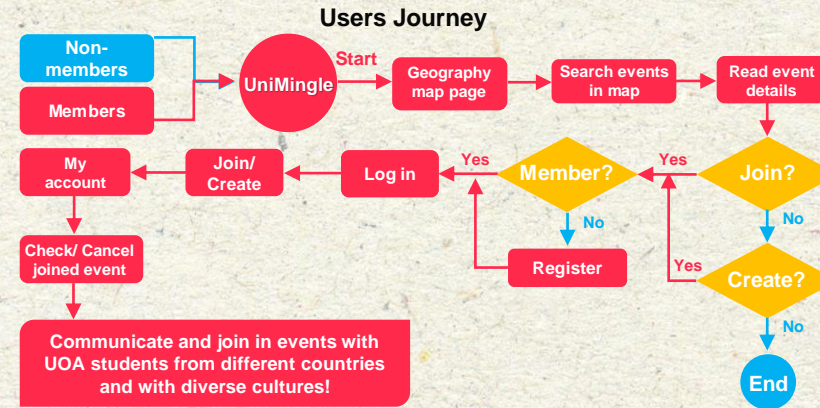
➤ Project Milestone

Milestone 1

• Front-end: the technology structure established and UniMingle interface of user login and register modules are completed.

• Back-end: Databases for user module and event module had been set up. And **the synchronization the fields with front-end** about user register function completed.
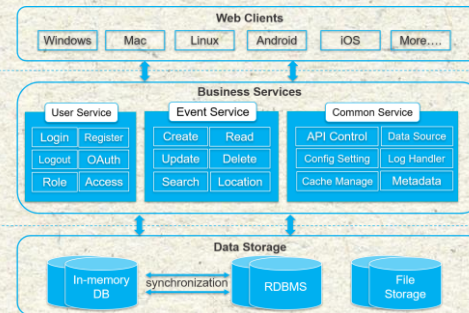
Milestone 2

User module: functions including register, log in and edit completed development and deployed online.

Event module: geography map page completed front-end and back-end development, **integrate Google map API** and deployed online. .

Project testing: conducted unit, functional, performance testing before official launch.

➤ Key Content

Users Journey

Non-members
Members
UniMingle **Start**
Geography map page
Search events in map
Read event details
My account
Join/ Create
Log in
Yes Member? **Yes** Join? **No**
No
Register
Yes Create?
Check/ Cancel joined event
No
End

Communicate and join in events with UOA students from different countries and with diverse cultures!

• Visitors need to use UOA student ID to register to become members of UniMingle.

• Various events will be published on UniMingle and can be viewed through real time heating map.

• Users can search for their interested events according to date, location or category, then join in or create their own events.

• In "my account" page, members can view joined events and quit joined events.

• **Administrator of UniMingle manages all users and events behind the scenes.**

➤ Technical Framework

Web Clients
Windows | Mac | Linux | Android | iOS | More….
Business Services
User Service: Login, Register, Logout, OAuth, Role, Access
Event Service: Create, Read, Update, Delete, Search, Location
Common Service: API Control, Data Source, Config Setting, Log Handler, Cache Manage, Metadata
Data Storage
In-memory DB — synchronization — RDBMS | File Storage

• Our system is basically a three-layered architecture: **presentation layer, business layer and database layer**.

• As we divide our system into different layers, it is easy for us to develop, test and maintain. Changes made in one layer of the architecture generally don't impact or affect components in other layers.

➤ Achievement

Planned Output	Actual Output
UOA students can register then log in, and edit personal profile.	Same as planned.
Events of various categories created by users and displayed on the real time heating map.	A certain amount of events had been created, but categories are not abundant so far.
UniMingle website passed pre-launch tests and deployed online.	Same as planned.
Attracted UOA students with diverse cultural backgrounds to register and join events.	The website promotion of UniMingle had not started, but will invite students in the future.

➤ Extension

• UniMingle will be transported to mobile ends including Android and iOS as an application.

• Business cooperation will be conducted through placing advertisements and coupons.

• Members can share events with their friends via Facebook, Twitter and Instagram.

➤ Conclusion

The project had achieved all functioned that proposed as planned. UOA students can easily register with their student IDs, then view and join events created by other users. Or they can create their owns. Further to this, events are conspicuous with the help of real time heating map. After conducting necessary tests which cover front-end and back-end, this project had been deployed online and opened access.

In the future, we will work on transporting this website to mobile and cooperating with merchants will be implemented.