

## Monash Mobility Competition

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| Name: Saburo Okita<br>Monash ID: 19046251<br>Email : <a href="mailto:Saburo_okita@hotmail.com">Saburo_okita@hotmail.com</a> or <a href="mailto:soki1@student.monash.edu">soki1@student.monash.edu</a><br>Campus: Malaysia<br>Phone : 016-2666430 |
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To interconnect the mobile University community using modern technologies can be done in several ways. In this writing, I am going to propose several ideas, which most probably can be implemented on mobile computers (notebook) and PDAs that has wireless network connection.

We can develop an application and put it under the student drive, where students can download and install it on their PDAs and or notebook. From here onwards I will refer the application as MMIA (Monash Mobile Interaction Application) (note that MMIA is just a fictional non-copyrighted name). MMIA will utilize the wireless network within the campus to have these functionalities:

- **Auto synchronization:** when MMIA is executed, it will check whether there exist new updates for the timetable, lecture notes, or any announcements from either the lecturer (e.g. replacement classes, changes in assignment, etc) or any club and societies the student is in. If there are then, the application will download them and show them on a proper format.
- **Video conferencing:** this might be a little far-fetched, but students who are not able to attend lectures, can view it real time using video streaming. Where a video camera will be placed inside the lecture hall, and it will stream the lecture online. This can be used as a substitute for replacement class too. Say that a lecturer is not able to attend the lecture, he / she can record his lecture using video camera first, then can stream it to the students. (it can be streamed or downloaded, depending on what the students want it to be)
- **Remote access:** this can range from simple stuff like accessing student drive, print out documents to the lab printer, but without having the need to be inside the computer lab, or to something weird like placing order on the canteen's food. Student can deposit some cash into their MMIA account, so that next time they can place order or pay their fees just by debiting their balance in the account.
- **Reminder:** MMIA can also be used to remind students about their current printing balance, internet quota, overdue fees, or assignment due dates.
- **Interactivity:**
  1. a chatting functionality can also be implemented, so that undergraduates can engage in discussion with other undergraduates remotely. It can also be used for consultation with the lecturer if the students can be at the university at that particular time. It may also implement voice over IP in it.
  2. Online community can also be created, whereas students can blog, post their profiles onto the university's server, and other students can view it. This can reduce the possibility of encountering online predators, or identity theft. It can be expanded to more interesting form, say that the canteen or library will have their own section within the MMIA system, showing the recommended food or books of the day, etc.
  3. Locator system can also be implemented. This is somehow useful within a big campus, when a student is looking for another student which is logged to the

MMIA server. It can return the seeker the position of the student that he / she is searching based on which access point is the sought student connected to.

The MMIA can be developed using Java, and can be accessed from the mobile devices using Java WebStart or it can also be implemented under different languages, as long as portability is ensured. Depending on implementation, it can have a login system, where students can login using their username and their Authcate password, or the server can identify the device automatically from the MAC address (but registration is required beforehand)

It will be good if everything within the MMIA is personalized. So that you can actually set your preference to only see announcement from IT related stuff, or maybe to only show up the menu of fish meals, etc.

Dear Okita, you have fees overdue of \$1000 + \$100 penalty. Please pay it on the finance counter or debit it from your MMIA cash account

Friend A is in Building G access point 4

Sub: So, how are you today ?  
Friend A : Still busy with my Perl  
Sub: You haven't finished that yet ?

Name: Mohammed  
Age: 24  
Gender: Male  
Course: Computer Science  
Semester 2 Year 3

New menu!  
Grilled Salmon.  
\$99.99 only

Chef recommendation of the day : Lamb chops (\$7.80)

Cool Campus workshop on 2nd September 2005, click for more details

Part time job available

Dear Okita, Dr. Lim is waiting for you in his office (Building G, Room 314)

Wow, the Perl assignment is surprisingly easy, blah, blah, blah.

That was a super easy assignment you know... |

Add him to your contact

MMIA Balance: \$54.00

Real time video conferencing