

Cafeteria Recharge System in Universities

-By team Stark's

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Problem statement:

Chitkara University has the strength of 6000+ students, staff and faculty members. About 2000 students live in hostels. These students approaches Square one for eating in good number. But the cafeteria scenario of our university is not that updated yet, it is quite undeveloped. The current situation is this, that during peak hours, the crowd is huge and it becomes very difficult to get an order placed and have it as well in that limited time of break.

An innovative technology solution is invited to overcome the problem regarding this ongoing system of our cafeteria (Square one), which is causing wastage of time and creating panic situation among students and other faculty members too. By creating an easy application to get the food ordered by recharging top-up medium through smartphones would be a better solution.

Existing solution:

Prepaid POS (point of sale) card solution, students obtain a rechargeable card with a spendable balance. To place order, student have to handover the card to the bartender who recharges it which allows student to place the order.

The spendable balance on the card is automatically and instantly deducted. The customer can continue to use the card till balance is left on it and later he has to recharge it if required.

Cons:

- Students get late for the classes.
- Too much time consumption.
- No proper details of food availability.
- Student have to stand and wait a lot in long queue.
- Chances of Frauds done by students are more.

Proposed solution:

The University should come up with an android/iOS application for cafeteria which would help us to make orders easily with no such time wasting and irritating standing in queue.

Overview:

The students will get the downloadable link for the application from the university's official website which will be easily accessible by any user.

The home page of the application will be the login page, which will ask that you are a new user or just direct login. The students must have a "username and password" for signup, for protection purpose we must going to link their accounts with their contact number from which they can easily change their password or login their accounts.

By logging in their ID students will get their cafeteria wallet, from there students can add balance to their wallet with their debit/credit cards. It will have all the menu details of our cafeteria. By which students can order food from the application directly.

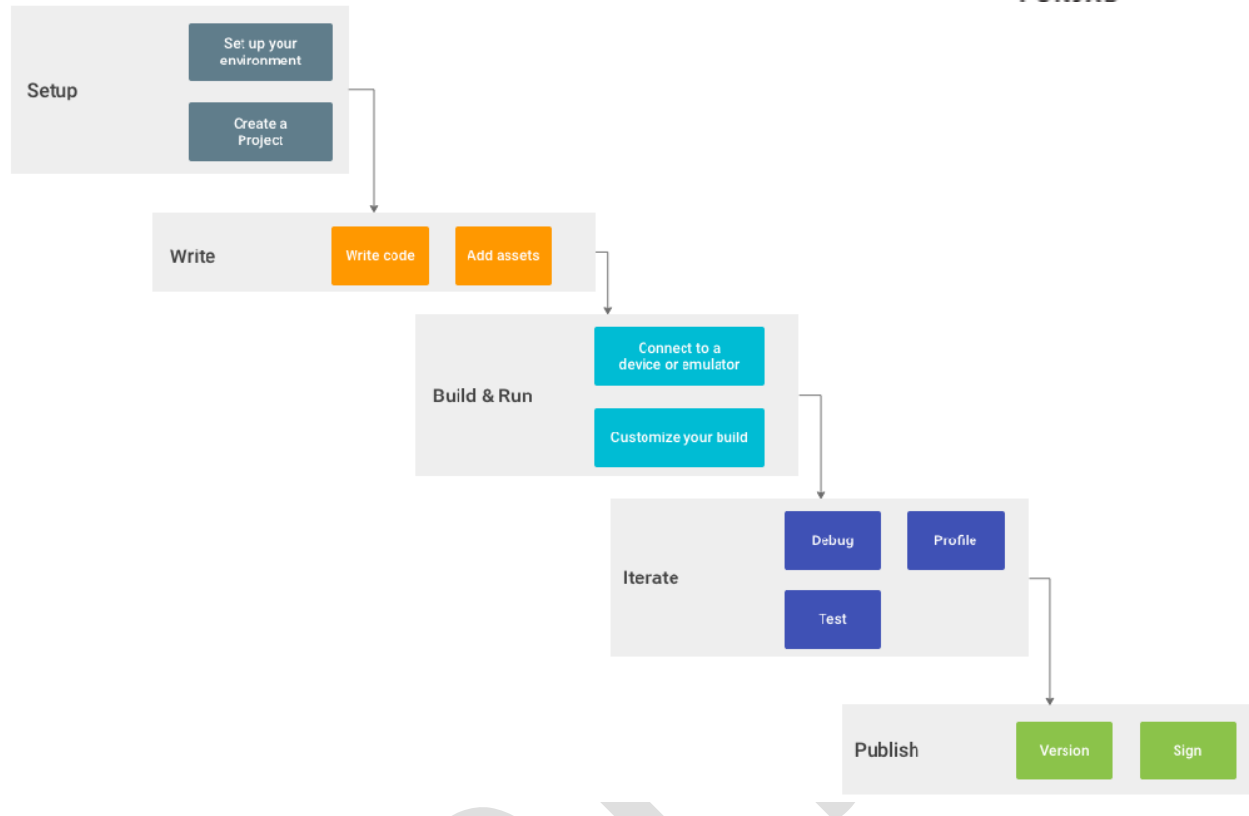
After successfully ordering their order with payments an invoice will generate automatically and the details of their order also reach up to the bartenders automatically. The invoice will work as a receipt, which students have to show to the bartenders to get their order.

Also, it will have a backup record of the orders of a week. After developing application we have to publish our application on App store/Play store from where students can download the application.

Publishing application on Play store:

Link:

https://developer.xamarin.com/guides/android/deployment_testing_and_metrics/publishing/publishing-to-google-play/

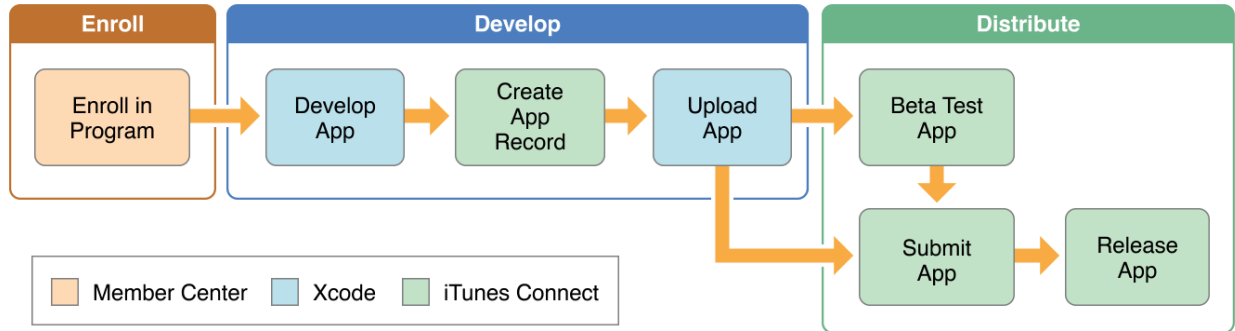


“Publishing application on Play store”

Publishing application on App store:

Link:

https://developer.apple.com/library/content/documentation/IDEs/Conceptual/AppDistributionGuide/Introduction/Introduction.html#//apple_ref/doc/uid/TP40012582-CH1-SW1



“Publishing application on App store”

Installing application on Apple Devices:

For installing application on iOS devices students can directly download it from App store.

Installing application on Android Devices:

For installing application on android devices students can directly download it from Play store.

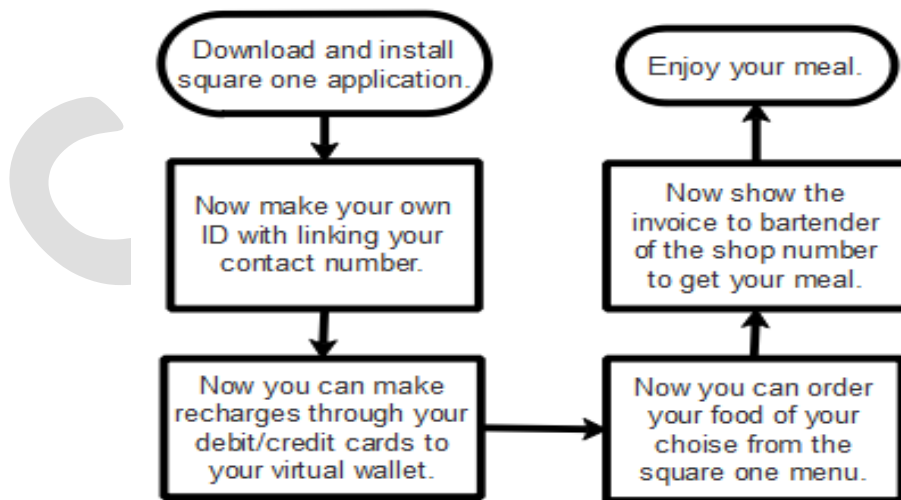
Required permissions:

- Data connection :
Receive data from internet
Full network access
- SMS :
Receive text messages (SMS)
- Photos/Media/Files :
Modify or delete the contents of your SD card
Read the contents of your SD card
- Other :
Run at startup
Control vibration
Install shortcuts

Hardware minimum requirements:

s.no.	Requirements	Specifications
1.	Hard drive	40 GB least
2.	Bar code reader	Iball
3.	RAM	512MB least
4.	Processor	Pentium 3.665 MHZ
5.	Graphics	On board graphics card 8 MB
6.	System type	1 GHz 32-bit(x86)
7.	Printer	-

‘We can also provide tablets to bar tenders and install Kiosk setup.’



Whole working of the “Application”

Pros:

- Save ample time as food is fuel to the body.

- Easily accessible.
- Order food without standing in queues.
- Less labor required.
- No frauds can be done.
- Most important it's safe

Tentative budget:

Publishing of application = Rs. 4,000/-

Bar code reader = Rs. 3,000/-

Installation of Kiosk system = Rs. 2,00,000/-