



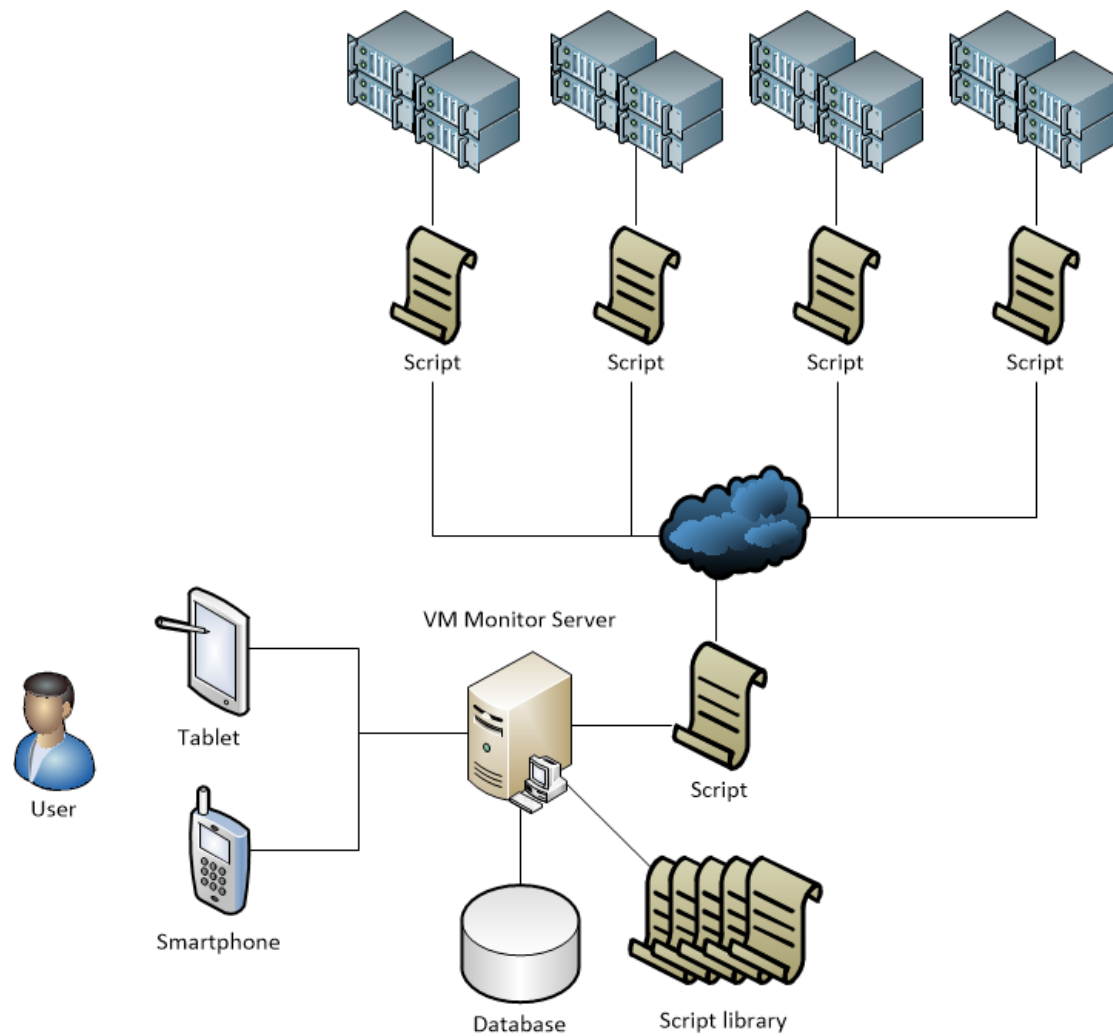
# Application Development for Mobile and Ubiquitous Computing

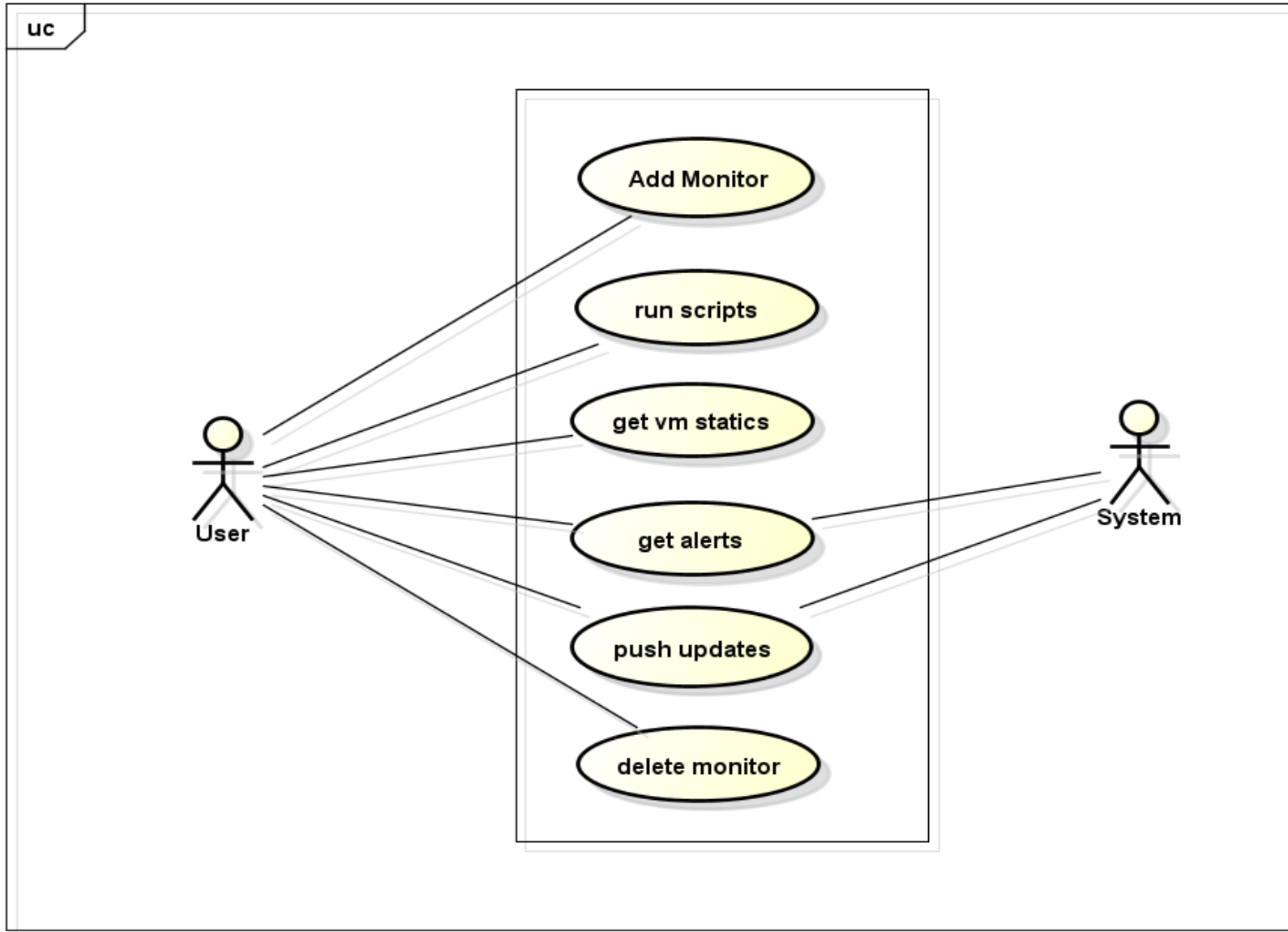
## Seminar Task First Presentation

GroupNo. 2 – VM Resource Monitor  
Team: Pradeep Kumar,  
Rodrigo Lins de Oliveira

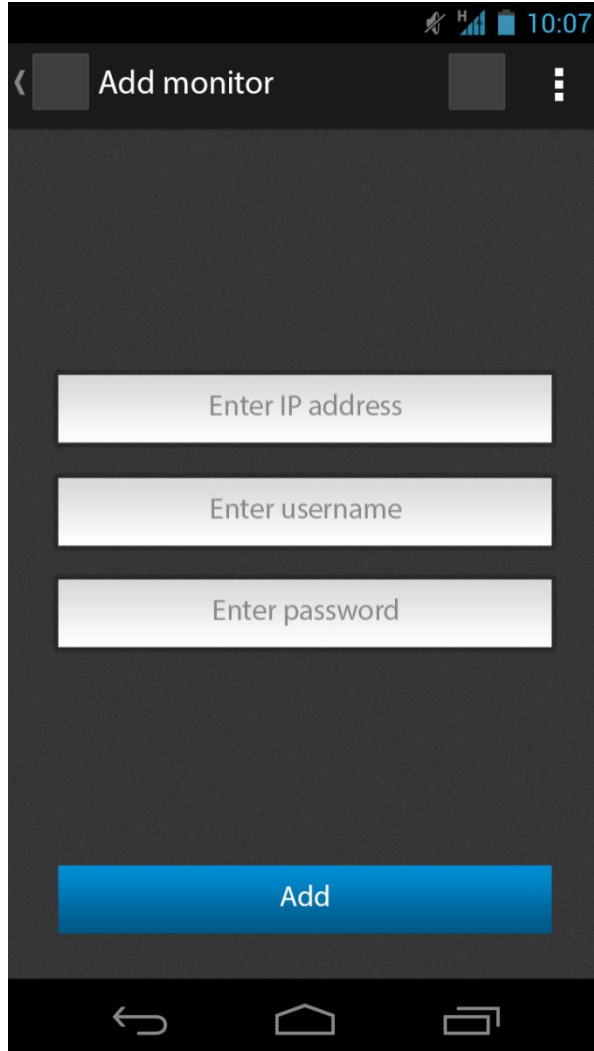
- Introduction
- System Architecture
- Use cases
- Technologies
- Mockup
- Challenges
- Work plan
- Conclusion

- After Deploying a VM if a user wants to know the health and statistics and to deploy his own applications and services he/she has to login to the system and check. To ease this problem we are planning to develop a solution where a user will always have access to cell phone and through which he/she can monitor the VM and deploy applications.
- Whenever something goes wrong or when monitor scripts predict something might go bad, in near future the user will get some alert on his cell phone and act accordingly.

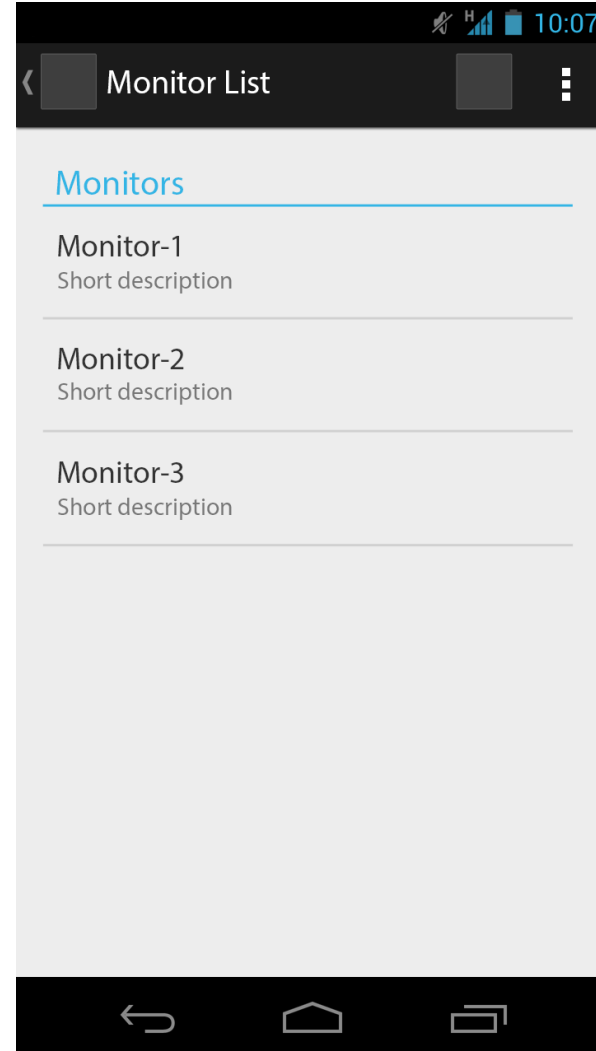




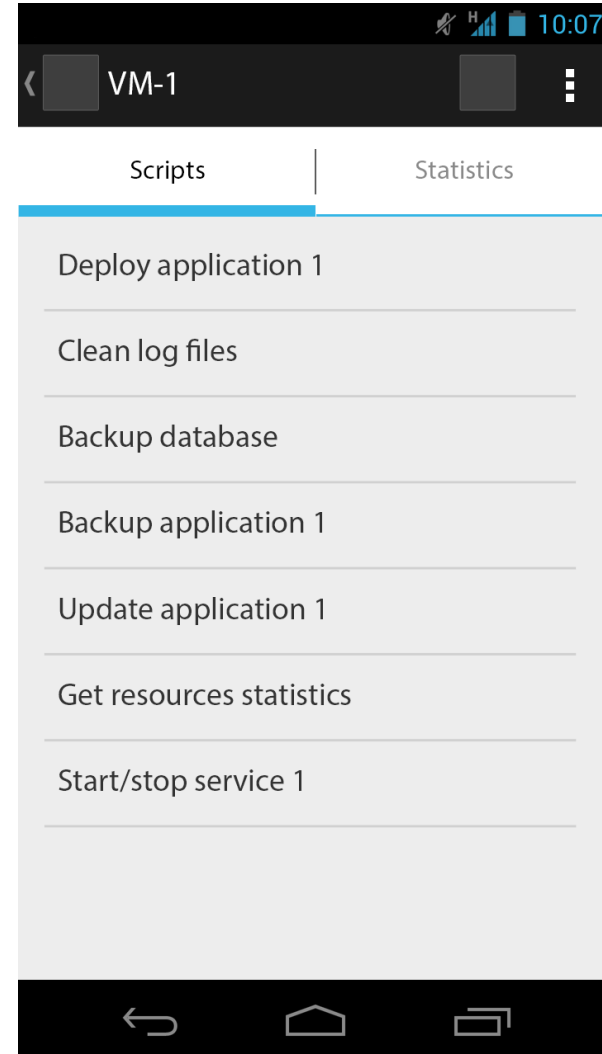
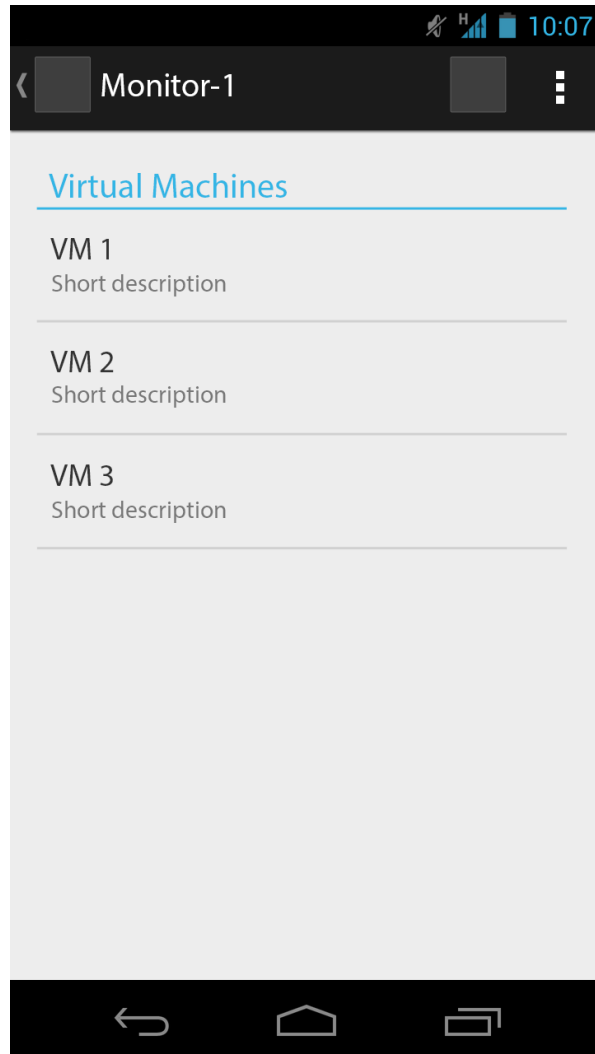
- In client side we are planning to use **Android** because its vastly used and more stable and we have all the APIs required for developing an application, deploying an application and testing.
- Server side we are planning to use **Linux** where we run going to run **apache** to handle the requests and perform the required operations on VMs and get timely information from VMs and push the data to client.
- Planning to use **python fabric scripts** to get information from VMs because is easy to use and it has a very good documentation.
- We are planning to use **Ansible orchestration** software to manage requests instead puppet or chef, because it is written in python and it is free.



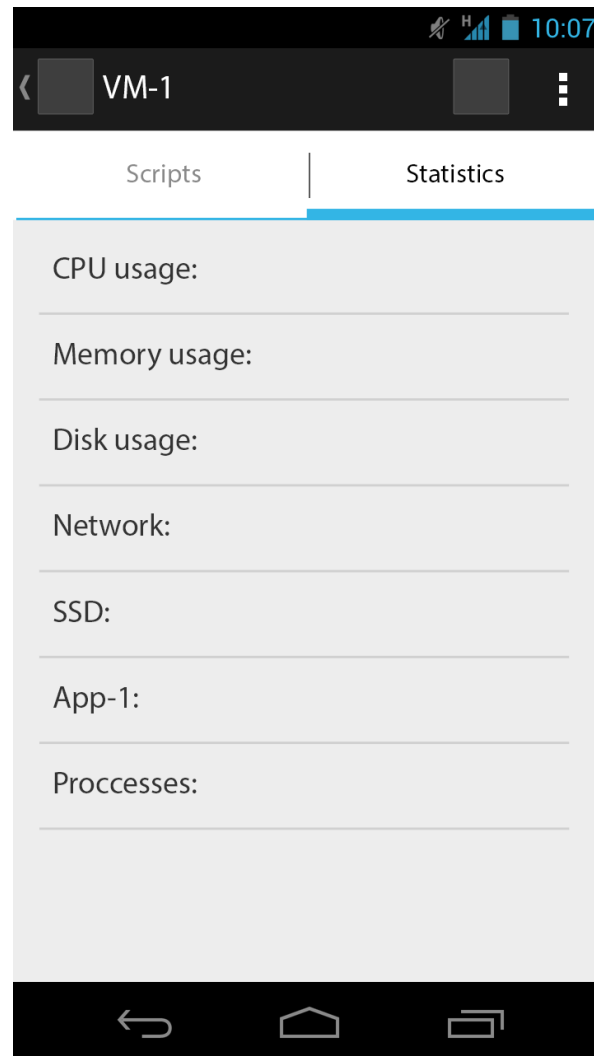
Mockup of the 'Add monitor' screen. The screen has a dark header with a back arrow, a title bar 'Add monitor', and a menu icon. The status bar at the top shows signal, H, battery, and time 10:07. The main area contains three white input fields with the labels 'Enter IP address', 'Enter username', and 'Enter password'. At the bottom is a large blue button labeled 'Add'. The Android navigation bar is at the very bottom.



Mockup of the 'Monitor List' screen. The screen has a dark header with a back arrow, a title bar 'Monitor List', and a menu icon. The status bar at the top shows signal, H, battery, and time 10:07. The main area has a light gray background with a blue header 'Monitors' underlined. Below it are three entries: 'Monitor-1' with 'Short description', 'Monitor-2' with 'Short description', and 'Monitor-3' with 'Short description'. Each entry is separated by a horizontal line. The Android navigation bar is at the very bottom.







- Mobile:
  - Understanding and use android SDK.
  - Assynchronous data transfer.
  
- Server:
  - Run scripts remotelly in a secure way.
  - Undertanding and implementation of an orchestration platform.
  - Communication between server and cloud instances.

- Client side development:
  - Familiarization with android SDK.
  - User interface development.
- Server side development:
  - Database modeling
  - Web interface construction.
  - Scripts implementation
- Cloud integration:
  - Build VM machine for integration.
- Testing! Testing! Testing!

***Thanks For Your Attention***

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