Sales Executive Dashboard App

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Problem Statement

- After the company's strategic planning meeting, top administration approve a funding of $50,000 for a Enterprise Mobility Pilot Project to explore a new mobile technology with business intelligent so that the company can stay innovative, competitive and possibly increase their capabilities, revenue/sales, and expand their global markets

Executive Summary

TechCon is an information systems and technology consulting contractor.

TechCon aims to provide the most skillful consultants and practical and top-of the line technology solutions for mobile systems and application web-based systems, and Enterprise Resource Planning (ERP) system implementations. TechCon services small, mid-size, to large-size companies in the united States

On Behalf of TechCon employees, I world like to take this opportunity to thank our clients for their business. For those who are not current clients, we would welcome the opportunity to be considered as your technology consulting contractor.

Sincerely

James Fracica
Co-Owner

Introduction

- TechCon
  - SAP based
  - Android based
- Sales Executive Dashboard (SED) App
  - Easier for Sales Executive to keep track or company
  - Important company info at a glance
  - If successful change of selling product

The Challenges and Innovation Needs

- Challenges
  - Very few mobile dashboard attempts
  - Traditionally designed for desktops
- Innovation
  - Need to find away to condense to small screen
  - Need to find way to arrange information

Initial Investigation and Findings

- ArcGis: Executive Dashboard (ArcGIS 10.1)
  - Used by local government leaders
  - Proactively view critical metrics
  - Identify trends
  - Raise questions
  - Device new management strategies
  - Apple Platform

Initial Investigation and Findings

- com-tec-co: Mobile Dashboard App
  - Financial Reports
  - Performance metrics
  - Custom arranged charts or graphs
  - Pre-defined Key Performance Indicators (KPIs)
  - Apple Platform

Existing IT Infrastructure

- Software
  - SAP
    - Financials
    - Human Capital Management
    - Sales and Service
    - Corporate Services
    - Mobility
    - Business Intelligence
- Hardware
  - Servers
    - Mobile
    - Business Intelligence
    - Business Application
    - Web
    - Etc

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
1. Initiating	**3 days**		**$800.00**
1.1 Identify Key Stakeholders	**1 day**	**Chris,James**	**$320.00**
1.1.1 Prepare stakeholder register	1 day		
1.1.2 Prepare stakeholder management strategy	1 day		
1.2 Prepare Project Charter	1 day	James	$160.00
1.3 Hold project kick-off meeting	1 day	Chris,James	$320.00
1.4 Project Charter Signed (Milestone)	**0 days**		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
2. Planning	**23 days**		**$5,120.00**
2.1 Hold team planning meeting	**1 day**	**Chris,James**	**$320.00**
2.1.1 Prepare Project Management Plan	1 day		
2.1.2 Prepare team contract	1 day		
2.2 Collect Requirements	**1 day**	**Chris,James**	**$320.00**
2.2.1 Prepare Requirements Management Plan	1 day		
2.2.2 Prepare Requirements Traceability Matrix	1 day		
2.3 Prepare scope statement	1 day	James	$160.00
2.4 Prepare Work Breakdown Structure	1 day	James	$160.00
2.5 Hold stakeholder meeting to verify scope with changes.	**0 days**	**Chris,James**	
2.6 Update scope with verified changes	1 day	James	$160.00
2.7 Design Dashboard App	**3 days**	**Chris,James**	**$960.00**
2.7.1 Design Layout	3 days		
2.7.2 Determine Information to be Displayed	3 days		
2.8 Prepare Activity and Milestone list	1 day	James	$160.00

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
2.9 Prepare Schedule	**2 days**	**Chris,James**	**$640.00**
2.9.1 Determine Task Resources	1 day		
2.9.2 Determine Task Durations	1 day		
2.9.3 Determine Task Dependencies	1 day		
2.9.4 Create Gantt Chart	1 day		
2.10 Plan Quality	**1 day**	**James**	$160.00
2.10.1 Prepare Quality Management Plan	1 day		
2.11 Plan Communications	**1 day**	**James**	$160.00
2.11.1 Prepare Communication Management Plan	1 day		
2.12 Plan Risk Management	**2 days**	**Chris,James**	**$640.00**
2.12.1 Prepare Risk Management Plan	1 day		
2.12.2 Prepare Risk Register	1 day		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
2.13 Acquire Supplier	**8 days**	**Chris**	**$1,280.00**
2.13.1 Prepare supplier contact document	1 day		
2.13.2 Request quotes from suppliers	1 day		
2.13.3 Evaluate suppliers	1 wk		
2.13.4 Select supplier	1 day		
2.13. 5 Sign contract (Milestone)	**0 days**		
2.14 Finalize complete project plan (Milestone)	**0 days**		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
3. Executing	**2.5 mons**		**$17,461.62**
3.1 Programming Sales Executive Dashboard App	**2 mons**		**$12,800.00**
3.1.1 Stage 1: Create Layout	**2 wks**	**Chris,James**	**$3,200.00**
3.1.1.1 Research Coding Information for Android Tab Layouts	1 wk		
3.1.1.2 Design Tab Layout	1 wk		
3.1.1.3 Create Tab Activites	1 wk		
3.1.1.4 Create Individual Tab XML layouts	1 wk		
3.1.1.5 Create Barebone Code for Tabs	1 wk		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
3.1.2 Stage 2: Program and Incorporate Database Information	**2 mons**		**$8,320.00**
3.1.2.1 Code the Main Class	**1 day**	**Chris,James**	**$320.00**
3.1.2.1.1 Program Code to Call Tab Classes	1 day		
3.1.2.2 Code the Revenue/Expense Tab	**0.8 wks**	**Chris,James**	**$1,600.00**
3.1.2.2.1 Program Code to Link Database information	3 days		
3.1.2.2.2 Test App and Database Code	2 days		
3.1.2.3 Code the Accounts Tab	**1 wk**	**Chris,James**	**$1,600.00**
3.1.2.3.1 Program Code to Link Database information	3 days		
3.1.2.3.2 Test App and Database Code	2 days		
3.1.2.4 Code the Distribution Tab	**1 wk**	**Chris,James**	**$1,600.00**
3.1.2.4.1 Program Code to Link Database information	3 days		
3.1.2.4.2 Test App and Database Code	2 days		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
3.1.2.5 Code Sales By Products Tab	**1 wk**	**Chris,James**	**$1,600.00**
3.1.2.5.1 Program Code to Link Database information	3 days		
3.1.2.5.2 Test App and Database Code	2 days		
3.1.2.6 Code Alerts Tab	**1 wk**	**Chris,James**	**$1,600.00**
3.1.2.6.1 Program Code to Link Database information	3 days		
3.1.2.7.1Test App and Database Code	2 days		
3.1.2.7 Code Home Tab	**1 day**	**Chris,James**	**$320.00**
3.1.2.7.1 Program Code to call Tabs	**1 day**		
3.1.2.7.1.1 Call Alert Tab	1 day		
3.1.2.7.1.2 Call Revenue/Expense Tab	1 day		
3.1.2.7.1.3 Call Sales By Product Tab	1 day		
3.1.2.7.1.4 Test App and Database Code	1 day		

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
3.1.3 Stage 3: Complete App Test/Troubleshoot with the Database	**4 days**	**Chris,James**	**$1,280.00**
3.1.4 Sales Executive Dashboard App Complete (Milestone)	**0 days**		
3.2 User Manuals	**2 wks**	**James,Chris**	**$3,200.00**
3.2.1 Create user manuals	1 wk		
3.2.2 Create troubleshooting guides and manuals for IT staff	1 wk		
3.3 Stakeholder signoff (Milestone)	**0 days**		
4. Monitoring and Controlling	**83 days**		**$210.00**
4.1 Status Reports (Bi-weekly)	**81 days**		**$70.00**
4.2 Progress Reports (Bi-weekly)	**81 days**		**$70.00**
4.3 Performance Reports (Bi-weekly)	**81 days**		**$70.00**

Work Breakdown Structure

Task Name	Duration	Resource Names	Cost
5. Closing	**8 days**	**Chris,James**	**$2,560.00**
5.1 Prepare final project report	5 days		
5.2 Prepare final project presentation	5 days		
5.3 Lessons learned	3 days		
5.4 Project Complete (Milestone)	**0 days**		

Milestones

- Project Charter Signed
- Hold Stakeholder Meeting to Verify Scope with Changes
- Sign Contract
- Sales Executive Dashboard App Complete
- Stakeholder Sign Off
- Project Complete

Gantt Chart

- See Microsoft Project Files

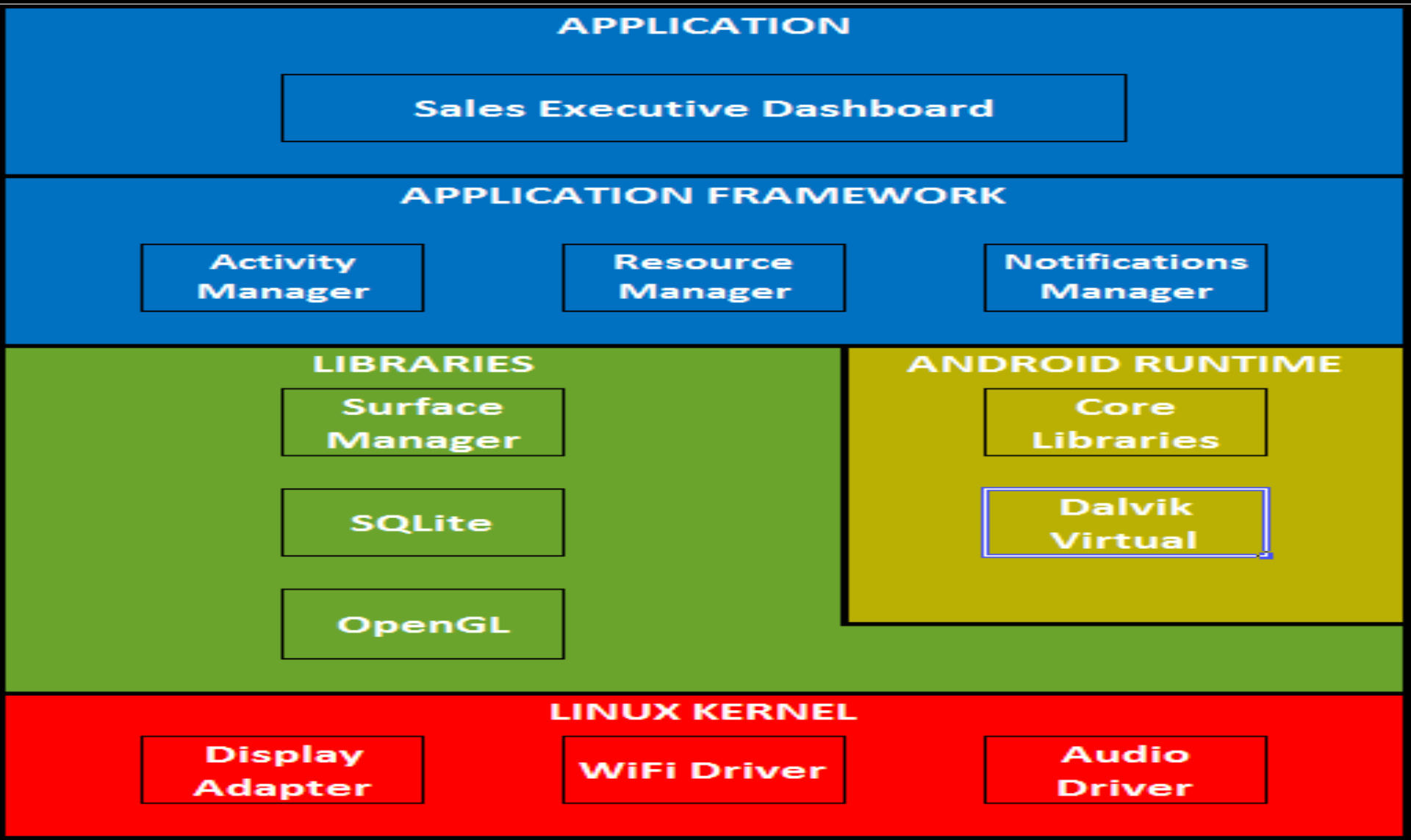
Project Cost

Product	Quantity	Cost
Sybase SUP Client Class B Unlimited Apps (Perpetual model) 2.1 Networked Seat	1 unit	$1,200.00
Sybase Support Now Standard Support	1 unit	$246.00
Software Tax	7% tax rate	$95.62
Labor		$25.010.00
		Total Cost
		$26.471.62

Project Risks Assessment

Risk No.	Related Risk No.	RISK	Timeframe Start	Timeframe End	I	Po (%)	Borda Rank	R	Manage/Mitigate
1		If employees start to have poor attendance (sickness, personal issues, etc)	08 Oct 2012	30 Jan 2013	Mo	70%			Create contigency with back-up positions
2		If supplies do not have the materials needed for the application	08 Oc 2012	30 Jan 2013	S	20%			Create contract with supply that will fine them for every day they are late, and create contingency plan
3	4	If there are security problems in the system	08 Oct 2012	30 Jan 2013	C	40%			Work with suppliers and software developers to set security protocols
4	3	If the softwware is not compatible wit hthe current system	08 Oct 2012	30 Jan 2013	C	20%			Find a middleware software solution
5	3, 4	If project team is not skilled enough to complete the project	08 Oct 2012	30 Jan 2013	C	35%			Might have to outsource or call in consultants adding to cost of project

The Design of System Architecture



New Hardware

- TechCon completed it's 3 year mobility project.
  - 95% of the employees use mobile devices
  - Company supports Android based phones version 2.3+
- Therefore no additional hardware required

New Software

- Sybase: Sybase Unwired Platform
  - Unlimited Apps
  - Version 2.1
  - Sybase Support Now Standard Support

Supporting Mobile Devices

- The SED App will support mobile devices with and Android based operating system version 2.3 and higher.

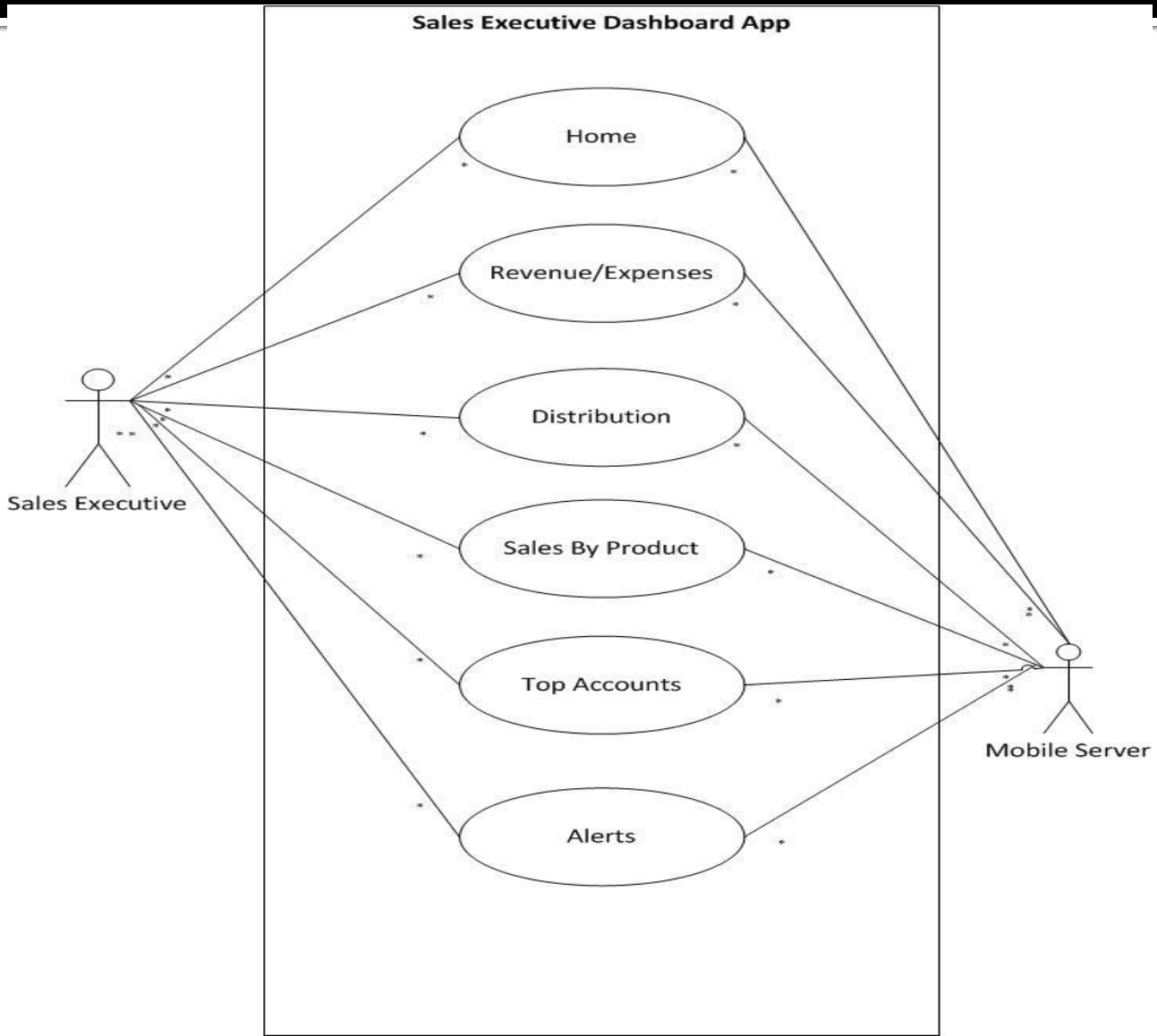
Considered Vendors

- SAP: Sybase
- Salesforce
- Cisco
- Dundas

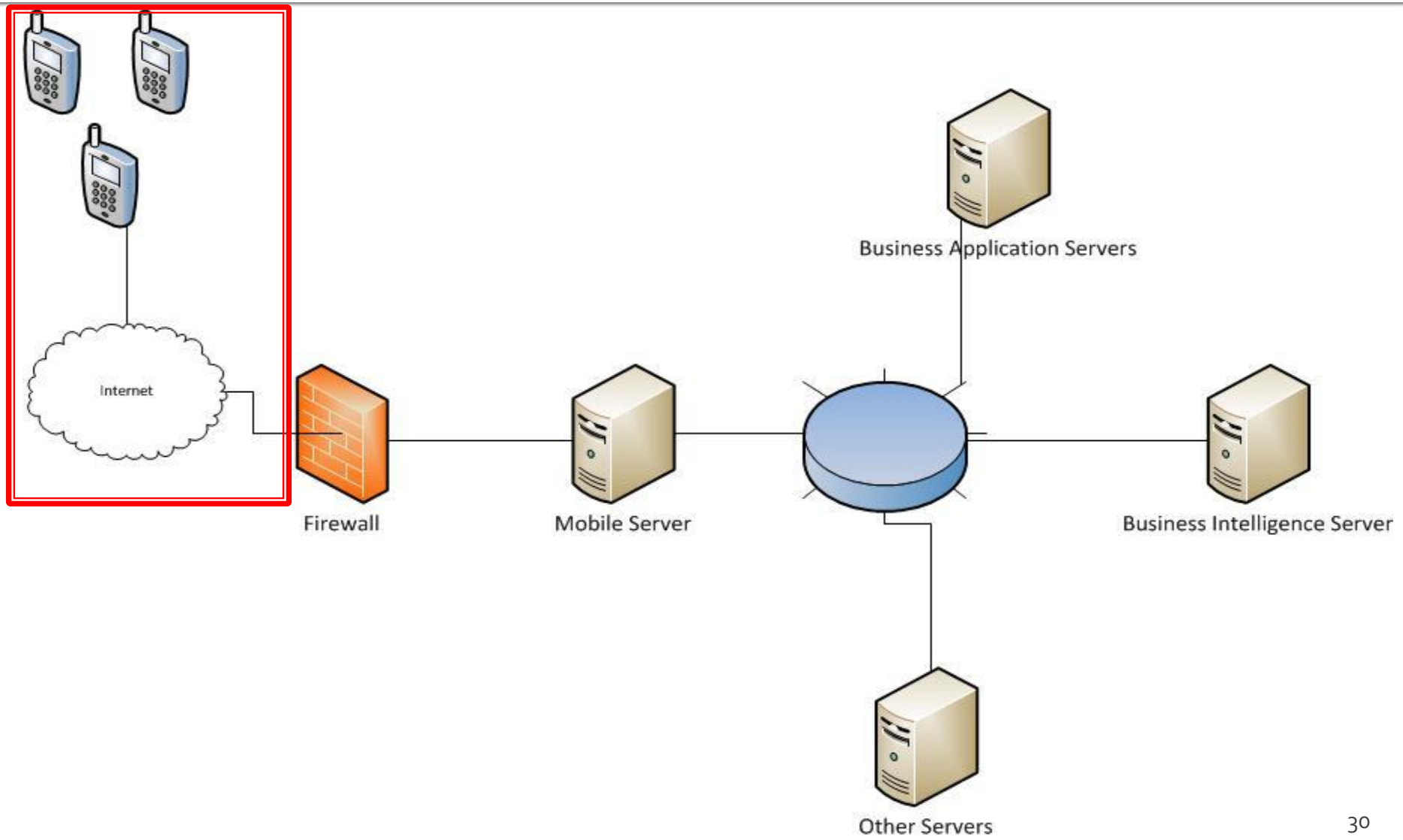
Data and Information System Modeling

- SED App Use Case
- Network Diagram: Connecting though WiFi
- Network Diagram: Connecting though Cellular Network
- Statechart Diagram
- Class and Objects Diagram

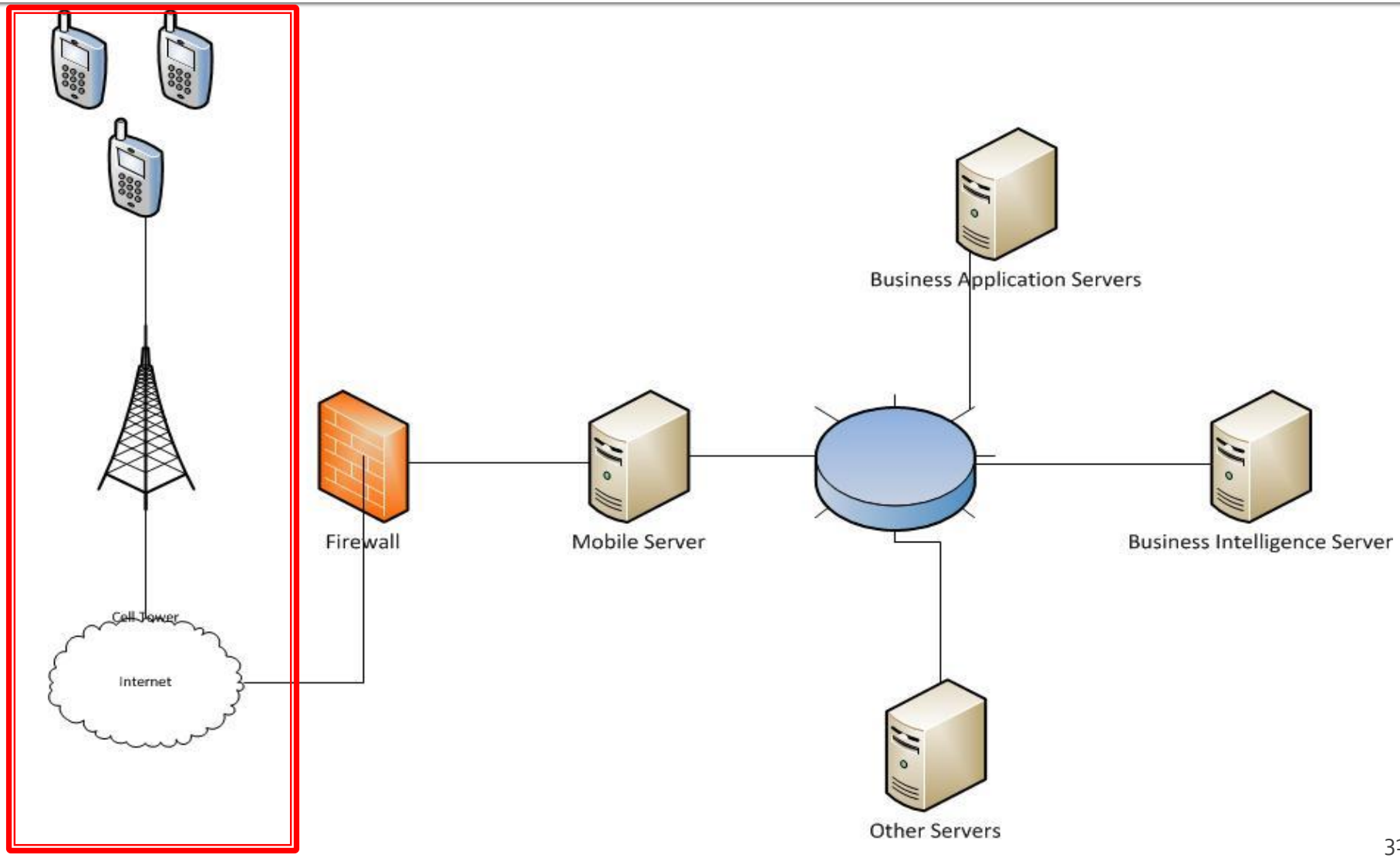
SED App Use Case



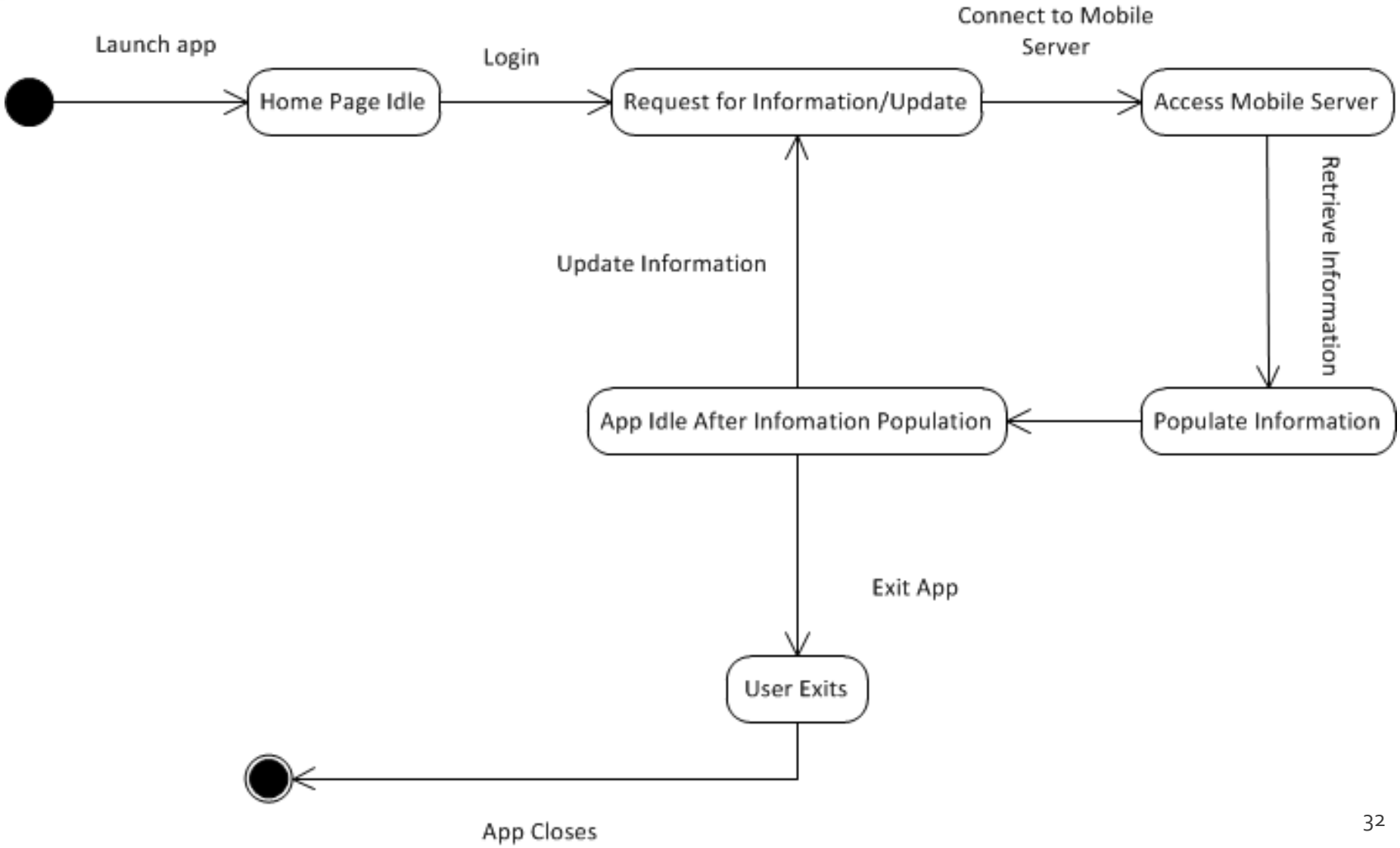
Network Diagram: Connecting though WiFi

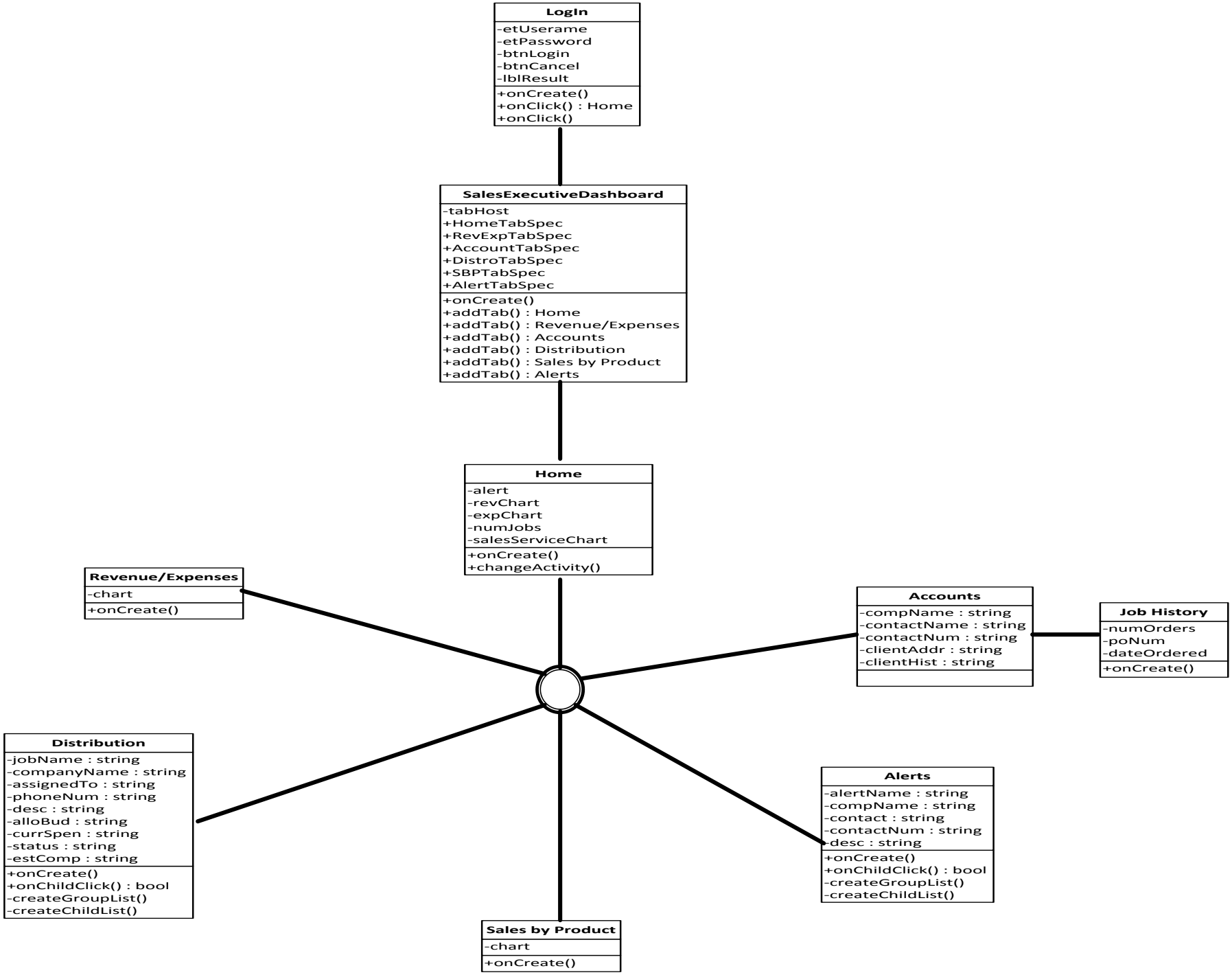


Network Diagram: Connecting though Cellular Network



Statechart Diagram




LogIn
-etUserame
-etPassword
-btnLogin
-btnCancel
-lblResult
+onCreate()
+onClick() : Home
+onClick()
SalesExecutiveDashboard
-tabHost
+HomeTabSpec
+RevExpTabSpec
+AccountTabSpec
+DistroTabSpec
+SBPTabSpec
+AlertTabSpec
+onCreate()
+addTab() : Home
+addTab() : Revenue/Expenses
+addTab() : Accounts
+addTab() : Distribution
+addTab() : Sales by Product
+addTab() : Alerts
Home
-alert
-revChart
-expChart
-numJobs
-salesServiceChart
+onCreate()
+changeActivity()
Revenue/Expenses
-chart
+onCreate()
Accounts
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-contactName : string
-contactNum : string
-clientAddr : string
-clientHist : string
Job History
-numOrders
-poNum
-dateOrdered
+onCreate()
Distribution
-jobName : string
-companyName : string
-assignedTo : string
-phoneNum : string
-desc : string
-alloBud : string
-currSpen : string
-status : string
-estComp : string
+onCreate()
+onChildClick() : bool
-createGroupList()
-createChildList()
Alerts
-alertName : string
-compName : string
-contact : string
-contactNum : string
-desc : string
+onCreate()
+onChildClick() : bool
-createGroupList()
-createChildList()
Sales by Product
-chart
+onCreate()

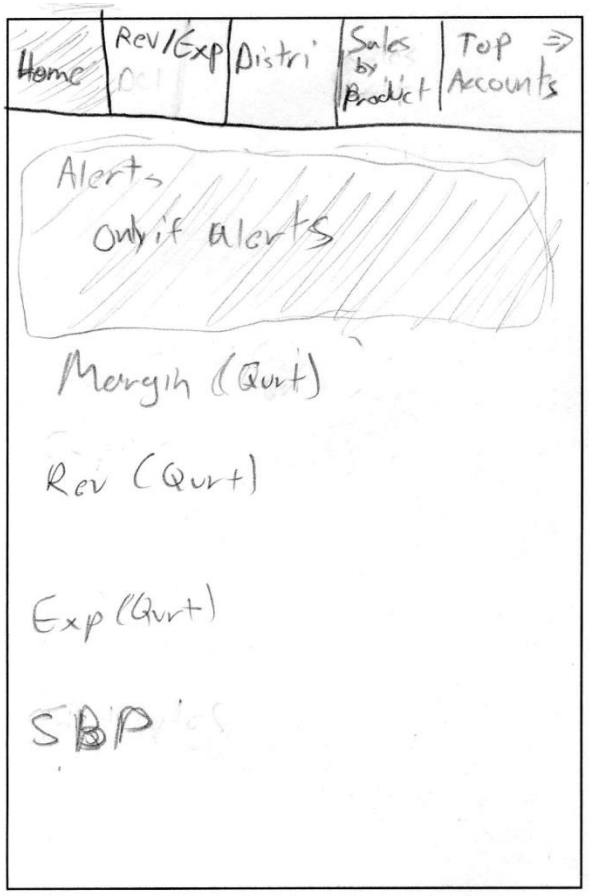
Mobile Device Middleware

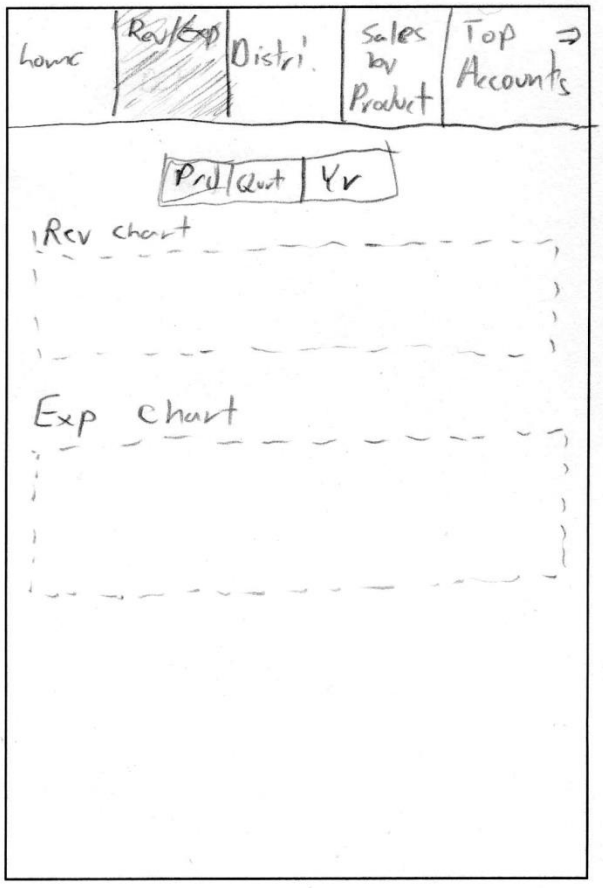
- Sybase: Sybase Unwired Platform
  - Exchange data from backend systems
    - Databases
    - Web Servers
    - Graphical Modeling
  - Create Applications
  - Enhanced Data Security

Mobile Device Program Design

- Sales Executive Dashboard App
  - TabHost
  - Scrollable Tabs
  - Stock Pictures
    - Pie Chart
    - Revenue and Expense Chart
  - Expandable List
  - Various Android Commands and XML

Pilot Project Testing (Sketches)





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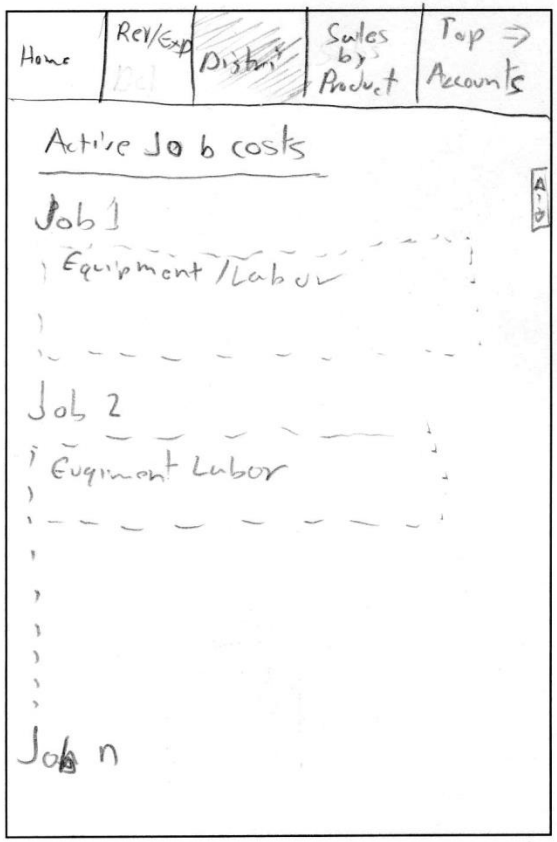

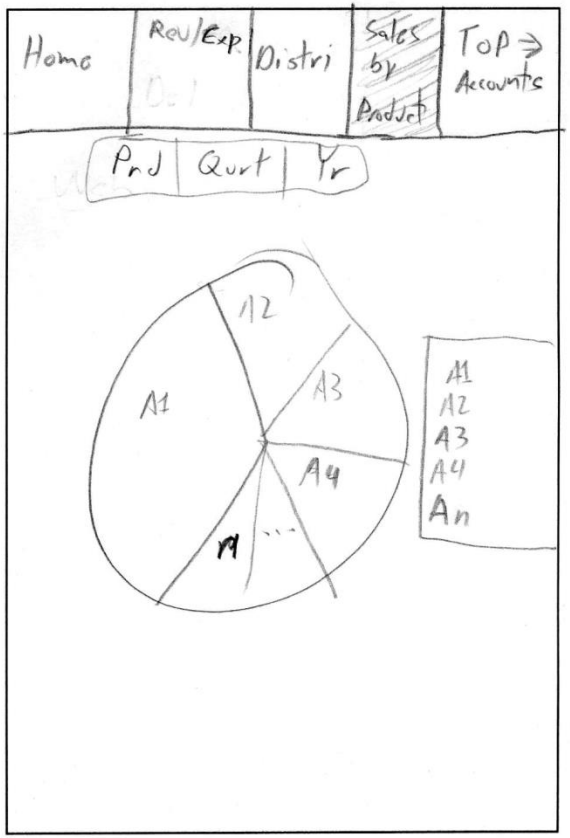

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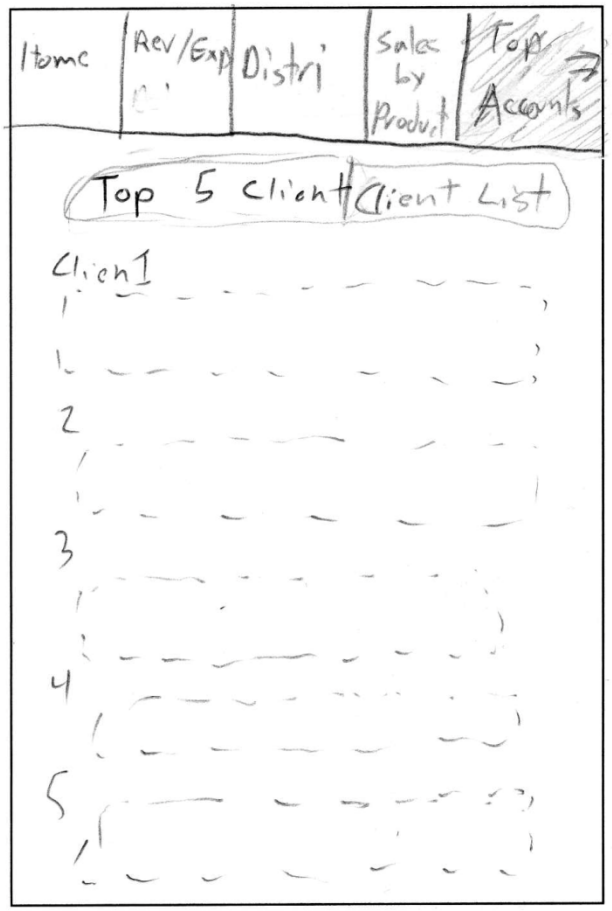
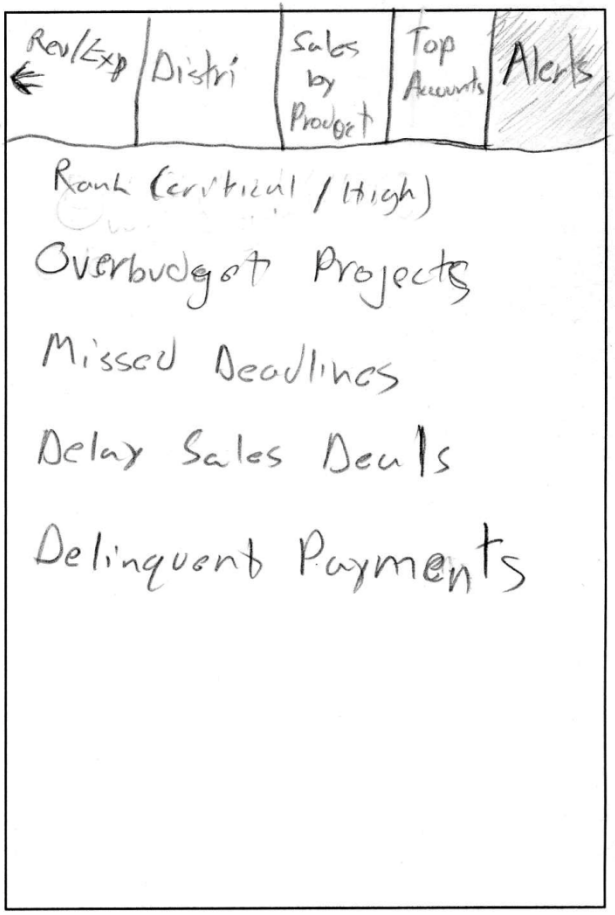
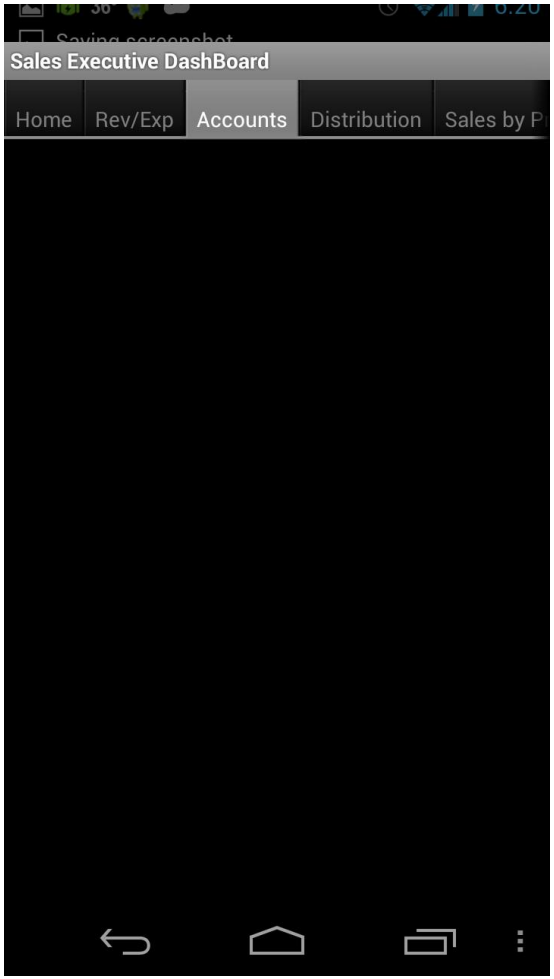




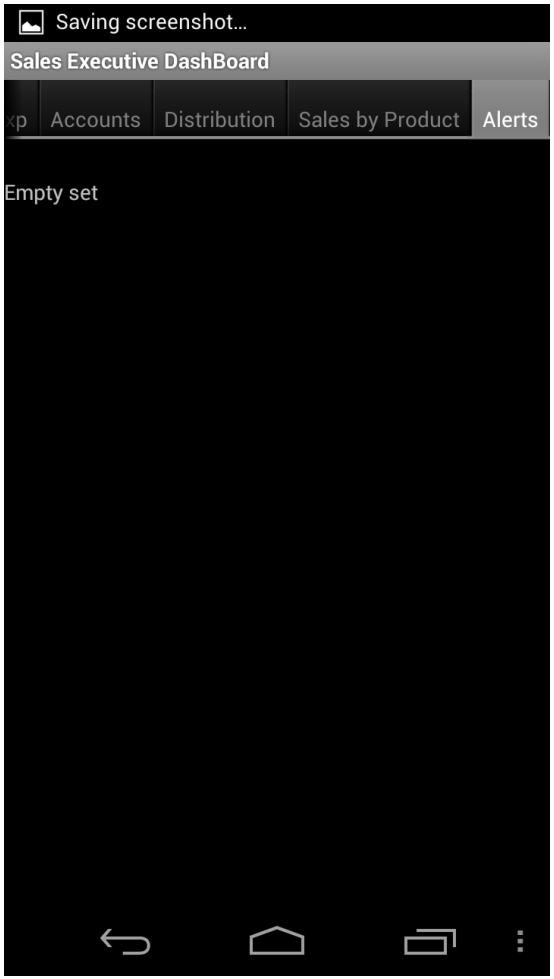
Pilot Project Testing (v1.0)

Pilot Project Testing (v2.0)

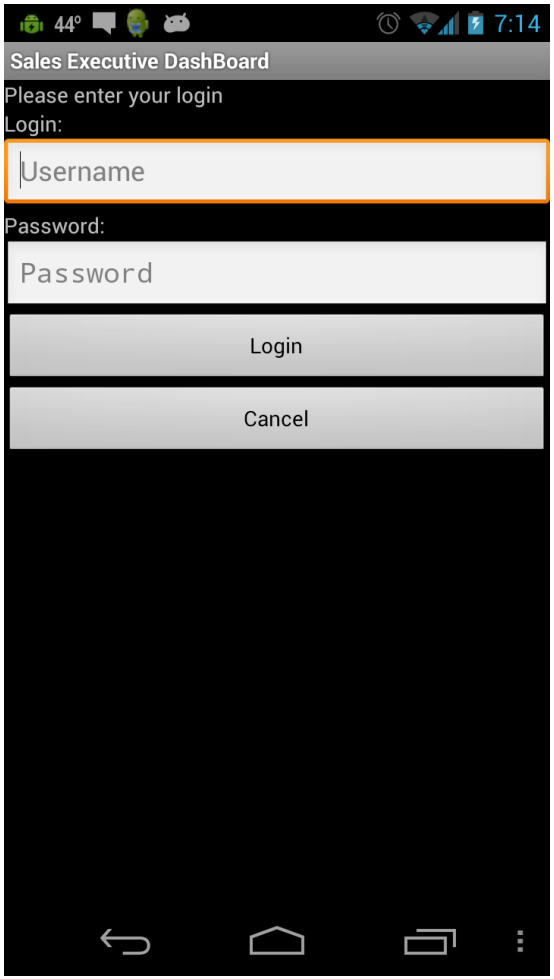
Pilot Project Testing (v2.0)



Pilot Project Testing (v2.0)

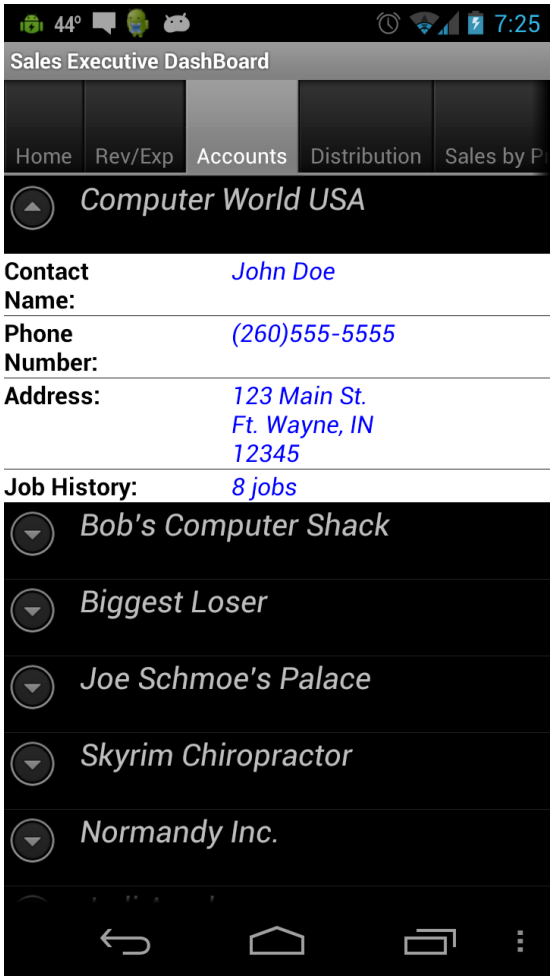


Pilot Project Testing (v3.0)



Pilot Project Testing (v3.0)

Pilot Project Testing (v3.0)



Pilot Project Testing (v3.0)

Pilot Project Testing (v3.0)

Lessons Learned

- Employees have gained Android programming knowledge
- Learned how to innovate executive dashboard layouts for mobile devices
- Learned how integrate Android operating systems with SAP software.

Summary

- The Sales Executive Dashboard App project was a complete success. We were able to innovate the dashboard layout to fit on a mobile screen. As well, as arrange information into a convenient way for executives to read. The Executives were thoroughly impressed with the App and its ease of use and the information available with the app. There are talks in the upper echelon of making the app publically available.

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