

‘Movies R US’

Software Application Specification

team-C

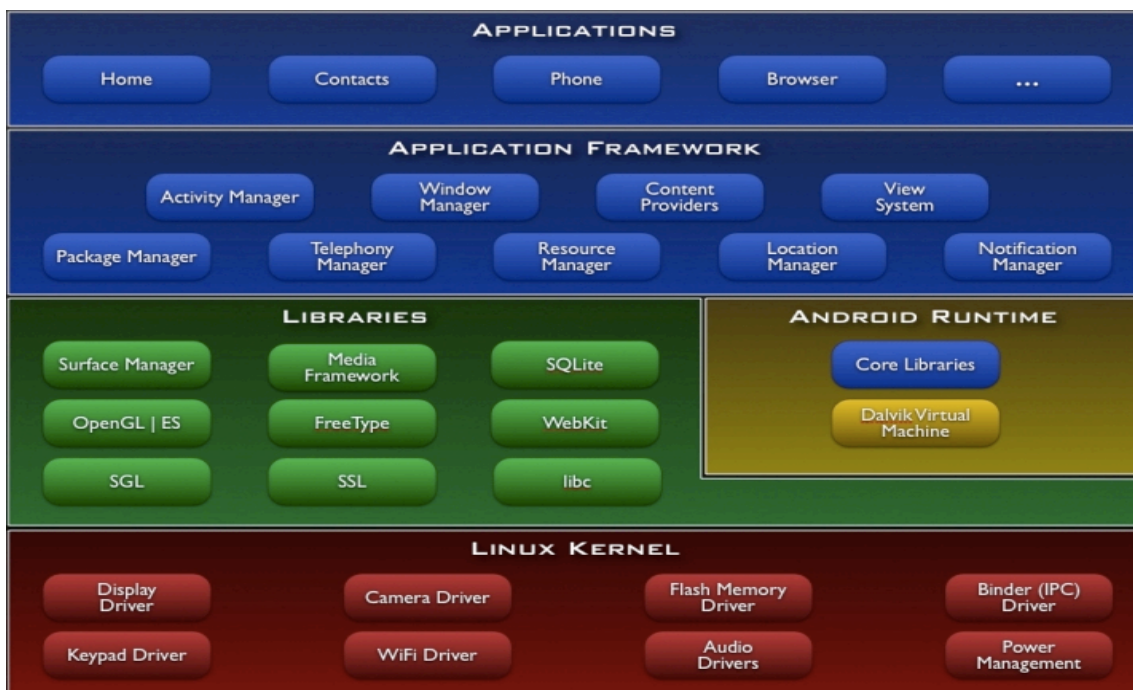
Introduction: To prevent licencing issues in the future and development nightmares it would be wise to approach this project using open tools which already have clear documentation and proven functionality. This will also allow for faster upgrades and patching at a later date. Please review the below purposed Requirements and Use Cases.

Purpose: The “Movies R US” application is intended to be a end solution which allows customers to access the “Movies R US” database from a variety of platforms for reservation of tickets.

Scope: The application should have both a web interface for the “Movie R US” website and cashier. The application will also require a custom touch screen interface that can communicate with the same database as the web client version.

System Overview: Two system types must be implemented. The first and most difficult will be the kiosk. Due to the touchscreen nature of the kiosk a touchscreen capable API will be required such as Android Honeycomb or Meego.

Android

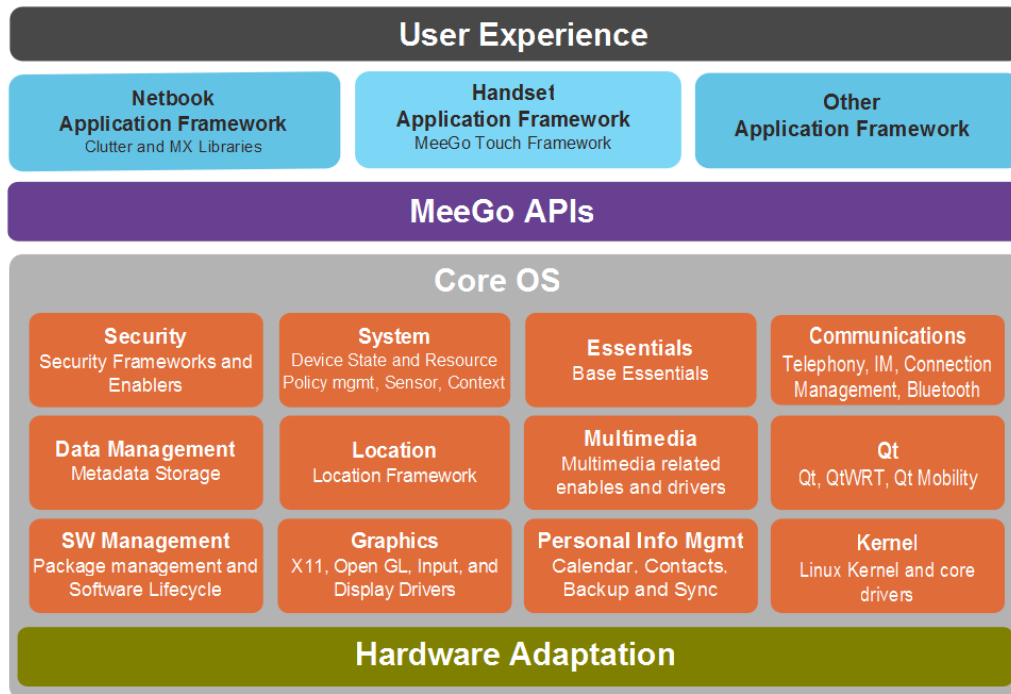


Meego

'Movies R US'

Software Application Specification

team-C



Beyond the multi-touch requirements the kiosk will additionally require communication via a built in client. The second type system is much easier due to its common nature and the experience level of our normal team. A simple web based application can be used and contain a few small variations for assumed users or actors.

References:

Android SDK: <http://developer.android.com/sdk/index.html>

MeeGo API: <http://apidocs.meego.com/1.1/platform/html/index.html>

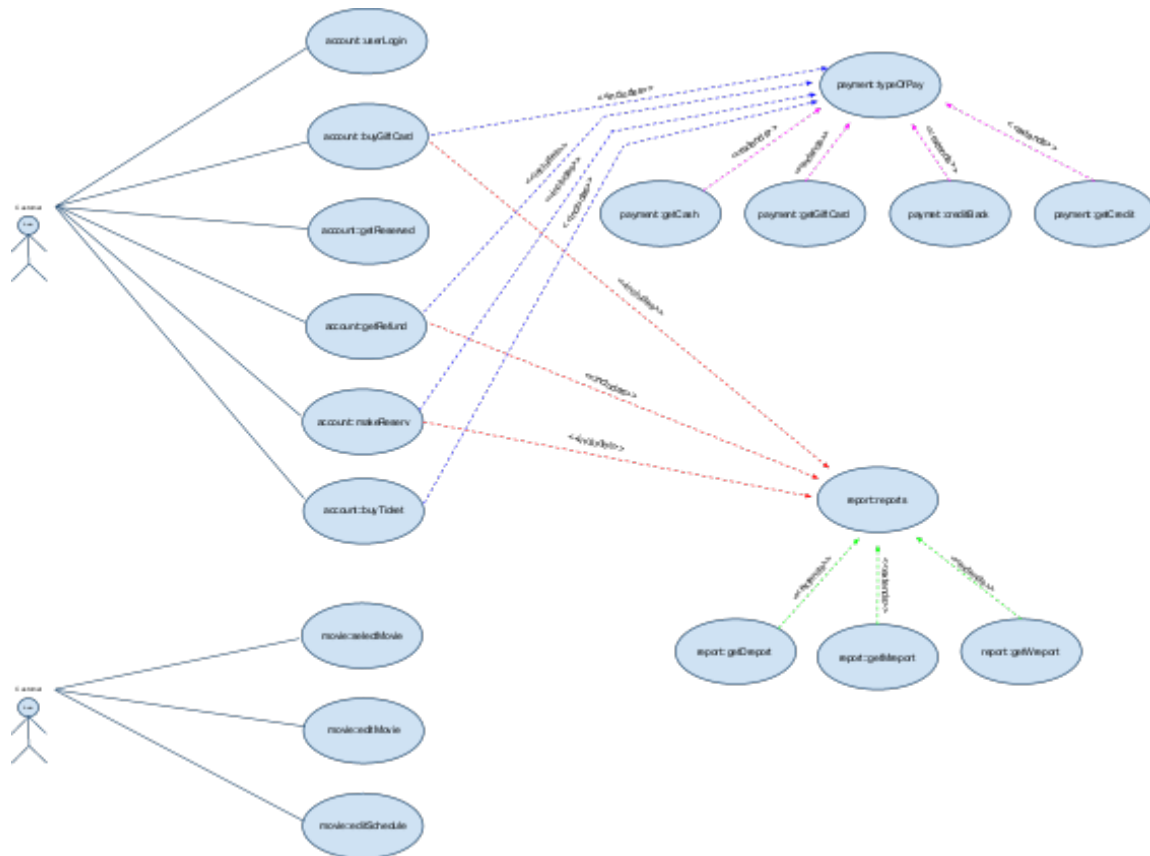
Constraints: Due to the hybrid nature of the kiosk, electrical engineers may be required as well as additional team member experienced with embedded devices.

Usage Scenarios: Beyond the variety of users we also have a variety of devices used. This is a generic translation of communication happening when using both the touchscreen and web based interfaces.

‘Movies R US’

Software Application Specification

team-C



Actors:

The human actors will be the customer and employee. Both will use the web based interface while only the customer will use the kiosk.

Device actors will be only the credit card machines used. One built in device for the kiosk and a networked one for the web based version.

Use Cases:

The following use cases are broken up into four groups account, movie, report, and payment.

Account::

Account::UserGUI
ID: 1
Description: Use case performs authentication and loads user profile
Actors: Customer
Preconditions: User can access Kiosk or Web Interface

‘Movies R US’
Software Application Specification
team-C

Main Flow: 1. If user is new 1.1 user creates new user name and password. 2. User logs in and authenticates. 3. User Profile is loaded 4. The use case ends.
Alt Flow: User cannot authenticate due to connectivity issues.
Post Condition: Users profile is loaded

Account::MakeReserv
ID: 2
Description: This allows a customer to make a reservation with their account via the web application.
Actors: Customer
Preconditions: User profile is loaded.
Main Flow: 1. Customer select Reserve ticket. 2. Customer selects movie name. 3. Customer selects movie time and date posted on schedule. 4. include <<Payment::TypeOfPay>> 5. Ticket ID is generated and added to Customer profile for printing or viewing. 6. Customers profile shows movie listed as reserved in their profile. 7. include <<Report::Reports>> 8. The use case ends.
Alt Flow: Movie showing is canceled. User will be refunded and alerted via email and automated telephony.
Post Condition: Users profile shows reservation. Ticket may be printed a Kiosk or from Cashier with Ticket ID number.

Movie::

‘Movies R US’
Software Application Specification
team-C

Movie::ViewMovie
ID: 3
Description: This allows viewing of a certain movie.
Actors: Customer, Employee
Preconditions: Kiosk or Web Application has a network connection.
Main Flow: <ol style="list-style-type: none">1. Viewer selects a movie from the Movie schedule on screen.2. selected MovieDAO is loaded.3. This use case ends.
Alt Flow: The MovieDAO has been removed but still shows on schedule.
Post Condition: Movie view is loaded.

Movie::PrintView
ID: 4
Description: This allows printing of loaded view
Actors: Customer, Employee
Preconditions: A current view is already loaded.
Main Flow: <ol style="list-style-type: none">1. User selects print.2. View is printed.3. This use case ends.
Alt Flow: Error printing.
Post Condition: Returns to normal view.

Movie::EditMovie
ID: 5

‘Movies R US’
Software Application Specification
team-C

Description: Employee may create or edit a single movie object.
Actors: Employee
Preconditions: Employee’s user profile is loaded
Main Flow: <ol style="list-style-type: none">1. Employee selects movie or creates new one.2. selected MovieDAO is loaded.3. Employee may edit movies items such as images and write-ups, etc...4. Employee saves changes and exits.5. MovieDAO is updated.6. The Use case ends.
Alt Flow: Employee requires heightened privileges.
Post Condition: Movie object has been edited.

Movie::EditSchedule
ID: 6
Description: This use case allows management to edit scheduled theater times for each movie.
Actors: Employee
Preconditions: Employee must have profile loaded and proper privileges to edit the schedule.
Main Flow: <ol style="list-style-type: none">1. Employee selects scheduling.2. Employee selects day, week, or month.3. matching SchedDAO is loaded.4. Employee edits day, week, or month.5. schedule is saved to SchedDAO.6. This Use case ends.
Alt Flow: DAO does not exist yet and is thus created new.
Post Condition: Theater schedule is updated.

‘Movies R US’
Software Application Specification
team-C

Movie::ViewSchedule
ID: 7
Description: This allows viewing of theater schedule.
Actors: Customer, Employee
Preconditions: Kiosk or Web Application has a network connection.
Main Flow: <ol style="list-style-type: none">1. Viewer selects schedule for a particular week.2. selected SchedDAO is loaded.3. This use case ends.
Alt Flow: The SchedDAO has been removed but still shows on schedule.
Post Condition: Schedule view is loaded.

Movie::GetTicket
ID: 8
Description: This allows Customers to use their reservation
Actors: Customer, Employee
Preconditions: Customer must have valid Ticket ID number. This is retrievable via users account at anytime.
Main Flow: <ol style="list-style-type: none">1. Customer enters in Ticket ID number into Kiosk or verbally to Cashier.2. Ticket ID generates movie and time of showing and creates valid ticket.3. Ticket is loaded in View.4. Use Case ends.
Alt Flow: Ticketing view is corrupted or other failure.
Post Condition: Ticket is loaded in view ready for printing or just viewing.

Movie::GetGiftCard

‘Movies R US’
Software Application Specification
team-C

ID: 9
Description: This Use case allows payment with a Gift Card.
Actors: Customers, Employee
Preconditions: User has valid Gift Card
Main Flow: <ol style="list-style-type: none">1. Customer enters Gift Card ID tag into Kiosk or verbally tells Employee who enters in the ID.2. Gift Card information is pulled.3. Gift Card is loaded and ready to use for payment as cash.4. Use case finishes.
Alt Flow:
Post Condition: Customer is credited for Ticket.

Report::

Report::GetDreport
ID: 10
Description: This use case extends ::Reports and Maintains a Daily report for Employee
Actors: Customer, Employee
Preconditions: report exists
Main Flow: <ol style="list-style-type: none">1. Employee selects reports button.2. Employee selects Daily report.3. matching ReportsDAO is loaded.4. Employee selects day.5. Day is loaded in view.6. The Use Case ends.
Alt Flow: Day has no report.

‘Movies R US’
Software Application Specification
team-C

Post Condition: Day is shown in view to Employee.

Report::GetWreport
ID: 11
Description: This use case extends ::Reports and Maintains a Weekly report for Employee
Actors: Customer, Employee
Preconditions: report exists
Main Flow: <ol style="list-style-type: none">1. Employee selects reports button.2. Employee selects Weekly report.3. matching ReportsDAO is loaded.4. Employee selects week.5. week is loaded in view.6. The Use Case ends.
Alt Flow: Week has no report.
Post Condition: Week is shown in view to Employee.

Report::GetMreport
ID: 12
Description: This use case extends ::Reports and Maintains a Monthly report for Employee
Actors: Customer, Employee
Preconditions: report exists
Main Flow: <ol style="list-style-type: none">1. Employee selects reports button.2. Employee selects Monthly report.3. matching ReportsDAO is loaded.4. Employee selects Month.5. Month is loaded in view.6. The Use Case ends.

‘Movies R US’
Software Application Specification
team-C

Alt Flow: Month has no report.
Post Condition: Month is shown in view to Employee.

Payment::

Payment::BuyTicket
ID: 13
Description: This allows a customer to purchase a ticket immediately and online.
Actors: Customer, Employee
Preconditions: User is at Kiosk or at cash Register with Employee or logged in to web application at Movie view.
Main Flow: 1. Customer selects purchase. 2. include <<Payment::TypeOfPay>> 3. Ticket ID is generated and printed immediately or saved in TicketDAO for use later. 4. The use case ends.
Alt Flow: Movie showing is full.
Post Condition: Customer has Ticket in hand.

Payment::BuyGiftCard
ID: 14
Description: Allows user to purchase a gift card.
Actors: Customer
Preconditions: User profile is loaded

‘Movies R US’
Software Application Specification
team-C

Main Flow: <ol style="list-style-type: none">1. User selects giftcard button.2. User selects giftcard amount of either 10, 20, 40 or custom amount above 10.3. If user selects custom amount above 10.<ol style="list-style-type: none">3.1 User is prompted for amount purposed.3.2 If user puts in amount below 10.<ol style="list-style-type: none">3.2.1 user is prompted to retry entry and return to 3.14. include <<Payment::TypeOfPay>>5. Gift Card number is generated and recorded in users profile.6. Gift Card is shown to customer for giving via email or printout.7. The use case ends.
Alt Flow: unsuccessful payment happens. No gift card is generated or charged.
Post Condition: Customer has Gift Card on account until used.

Payment::CreditBack
ID: 15
Description: This allows a customer to retrieve monies back for a refund.
Actors: Customer, Employee
Preconditions: User is at Kiosk or at cash Register with Employee or logged in to web application at Movie view.
Main Flow: <ol style="list-style-type: none">1. Customer selects refund.2. include <<Payment::TypeOfPay>>3. Customer selects refund type, Cash, Credit. Credit only if not at register.4. If Credit.<ol style="list-style-type: none">4.1 Creditor is contacted and Customer is credited back funds.5.Else.<ol style="list-style-type: none">5.1 Customer is given cash.6. Customers Ticket ID or GiftCard is marked void and data object is removed.7. The use case ends.
Alt Flow: Credit company cannot be reached customer will be given cash.

‘Movies R US’
Software Application Specification
team-C

Post Condition: Customer has been refunded.

IDtestHandler::

IDtestHandler::TestTicket
ID: 16
Description: This is a tool specifically for testing for proper data creation of tickets.
Actors: Employee
Preconditions: Employee must be logged in as admin.
Main Flow: <ol style="list-style-type: none">1. Employee uses Test Ticket System button.2. Successful ticket creation is confirmed or denied.3. This Use Case ends.
Alt Flow: If system results in no returns the error is likely hardware issues.
Post Condition: Employee should have an Idea if support is required or not.

IDtestHandler::TestGiftCard
ID: 17
Description: This is a tool specifically for testing for proper data creation of Gift Cards.
Actors: Employee
Preconditions: Employee must be logged in as admin.
Main Flow: <ol style="list-style-type: none">1. Employee uses Gift Card System button.2. Successful Gift Card creation is confirmed or denied.3. This Use Case ends.
Alt Flow: If system results in no returns the error is likely hardware issues.

‘Movies R US’
Software Application Specification
team-C

Post Condition: Employee should have an Idea if support is required or not.
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‘Movies R US’

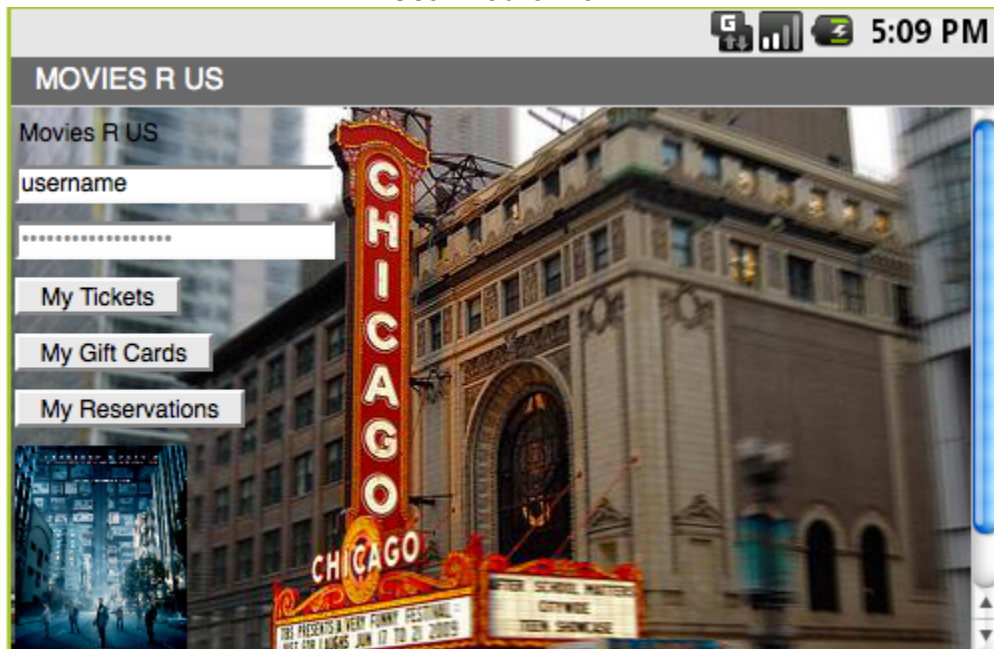
Software Application Specification

team-C

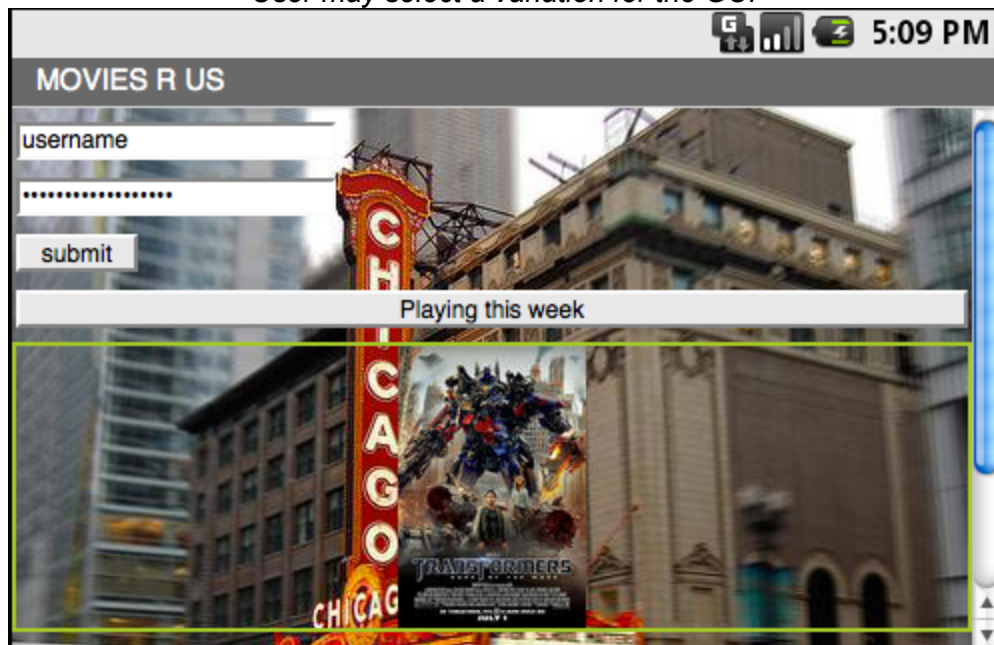
Prototype Interface:

This is the latest gui version on our webapp simulator. The web based version is of course slightly different but will have the same look for the most part. We do not want our users having to figure out an entire new design each time. This is on a myTouch phone. The Kiosk will look almost identical.

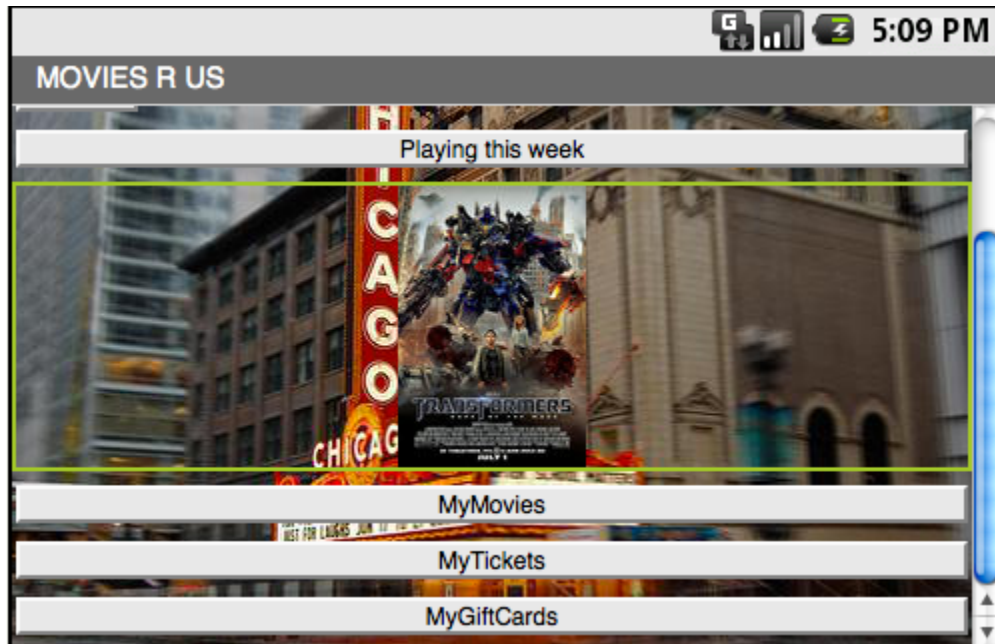
User Mobile View



User may select a variation for the GUI



‘Movies R US’
Software Application Specification
team-C



Employee Editor View

