

MICHIGAN STATE
UNIVERSITY

Beta Presentation

Synchronized Program Content Delivery

The Capstone Experience

Team Motorola Mobility

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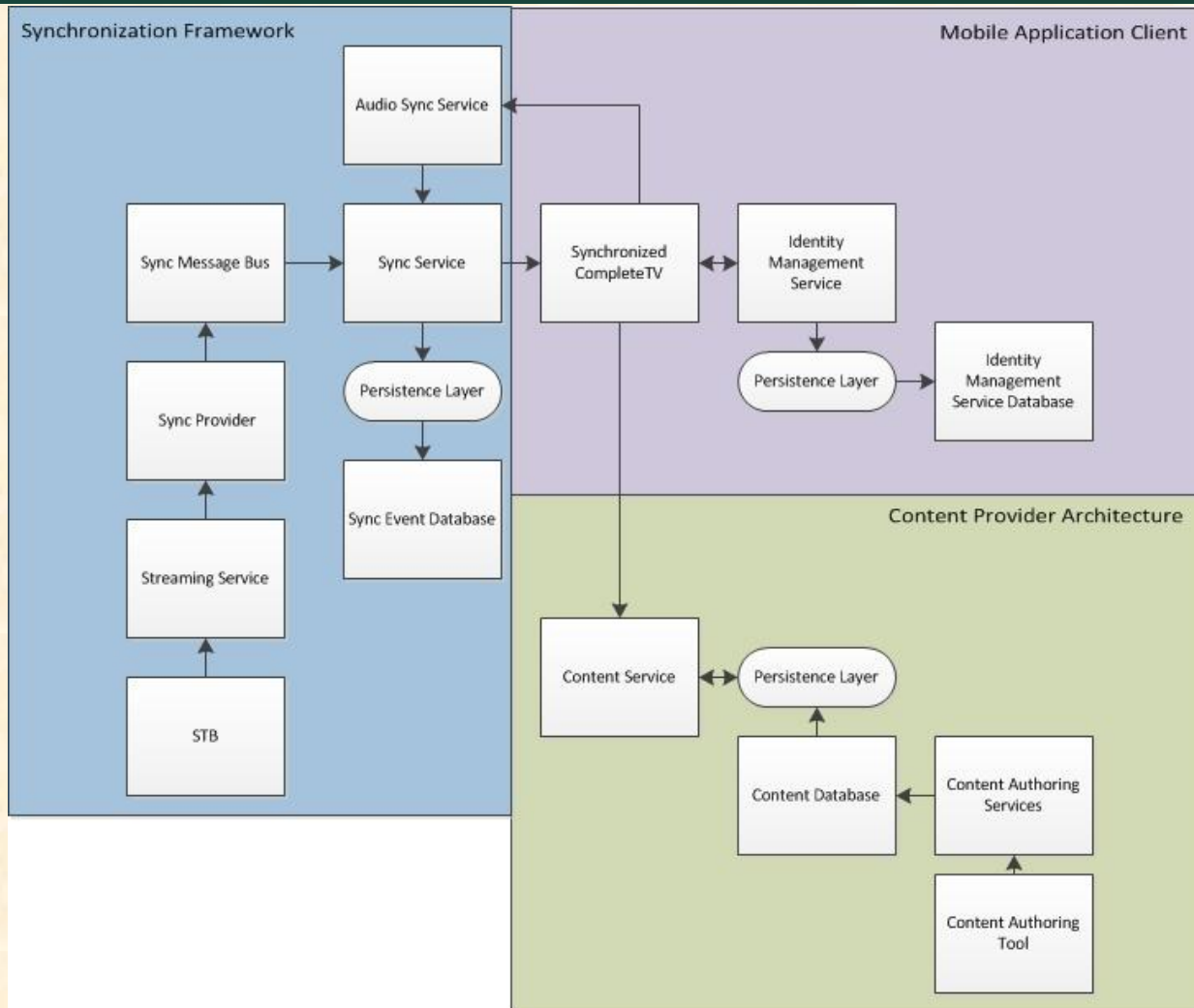
*From Students...
...to Professionals*

Project Overview

- Synchronized Program Content Delivery Framework
 - Synchronize what the user is viewing on their television with appropriate secondary content on mobile device
- Audio Sync Service
 - User can record sample audio footprint of a program, and the sync service will identify the program and sync
- Complete TV mobile app
 - Display secondary content
 - Allow users to register devices
- Set Top Box User Interface
 - Similar to a program guide



System Architecture



Set Top Box Program Guide – Live

Program Guide 3:09PM

SUN 11/6	12:00	12:30	13:00
1 FOX	Home Improvement	Everybody Loves Raymond	The Simpsons
2 TBS	Everybody Loves Raymond	Everybody Loves Raymond	Everybody Loves Raymond
3 CN	The Looney Tunes Show	Looney Tunes	The Simpsons

Everybody Loves Raymond
"Confronting the Attacker"- Still reeling after his encounter with a bull, Robert loses his nerve on his first day back with the police force and decides to quit his job to begin a new career in telemarketing.



Set Top Box Program Guide – VOD

The screenshot displays a VOD interface with a teal background. At the top left, the text 'Video on Demand' is shown in white. At the top right, the time '3:09PM' is displayed. Below the title, there are three filter buttons: 'All', 'Comedy', and 'Animated', with 'Animated' being the active selection. A list of programs is shown below the filters, with 'The Simpsons' highlighted in a dark blue bar and 'Looney Tunes' in a lighter blue bar. At the bottom, a detailed description for 'The Simpsons' is provided, including the episode title 'Trash of the Titans' and a list of guest voices.

Video on Demand 3:09PM

All Comedy **Animated**

The Simpsons

Looney Tunes

The Simpsons
"Trash of the Titans"- Homer runs for sanitation commissioner after the garbage man stops picking up his trash. Voices of Dan Castellaneta, Julie Kavner, Nancy Cartwright and Yeardley Smith. Guest voices of actor Steve Martin and music group U2.



Content Page

Select Episode

Watching: "Home Improvement"

Tim Allen

<http://t.co/ypUrAdgX> <http://t.co/vchiaGwv>

on the set of Last Man Standing
<http://t.co/1rC1Jwlr>

on the set of Last Man Standing with
(director) John Pasquin <http://t.co/Loa13R3Y>

Saying hello from a live taping here in
LA. The show airs while I tape. How was
it folks?

In case you missed it <http://t.co/CEMcpTk5> <http://t.co/h5ma1.q2o>

just got the new DROID BIONIC
@motorola Too cool, frickin fast just the
way I like it- like my cars!

Home Improvement

Home Improvement

Home Improvement (TV series)

Home Improvement - Patricia Richardson

Home Improvement - Pamela Anderson

Home Improvement - Tim Allen

Home Improvement

Netflix

Logged in as: Test

Filter: All Types

Current Episode Description:
Jill's newlywed sister spoils Tim's poker night when she brings her marital problems to Jill and Tim.



Device Management Page

The screenshot shows a web interface for 'Account Settings'. At the top left is a 'Back' button with a left-pointing arrow. At the top center is the title 'Account Settings'. At the top right is a 'Logout' button. The main content area is light gray and contains two sections. The first section is titled 'Username: Test' in a dark gray header. Below this header, the user's details are listed: 'First Name: Paul2', 'Last Name: Detkowski', and 'Email Address: test.edu'. Below the text is a circular edit icon with a pencil. The second section is titled 'Devices' in a dark gray header. Below this header, there is an 'Alias:' label followed by a text input field containing 'New1'. Below the input field are three circular icons: an edit icon with a pencil, a delete icon with a red minus sign, and a plus icon with a green plus sign.



Mobile Program Guide - Live

← Back Select A Program Select VOD Menu

SUN 11/6	7:00	8:30	9:00
1 FOX	Home Improvement	Everybody Loves Raymond	The Simpsons
2 TBS	Everybody Loves Raymond	Everybody Loves Raymond	Everybody Loves Raymond
3 CN	The Looney Tunes Show	Looney Tunes	The Simpsons

Home Improvement

60MIN LEFT

"Luck Be a Taylor Tonight"- Jill's newlywed sister spoils Tim's poker night when she brings her marital problems to Jill and Tim.

Minutes:

Seconds:



Mobile Program Guide - VOD

The screenshot shows a mobile application interface for selecting a program. At the top, there is a dark header bar with a 'Back' button on the left, the text 'Select A Program' in the center, and 'Select' and 'Live Menu' buttons on the right. Below the header, there are three filter buttons: 'All', 'Animated', and 'Comedy'. A horizontal row of three program selection buttons is displayed: 'Everybody Loves Raymond', 'The Simpsons' (which is highlighted in a darker blue), and 'Looney Tunes'. Below this row, the selected program 'The Simpsons' is detailed. The title 'The Simpsons' is followed by a description: '"Trash of the Titans"- Homer runs for sanitation commissioner after the garbage man stops picking up his trash. Voices of Dan Castellaneta, Julie Kavner, Nancy Cartwright and Yeardley Smith. Guest voices of actor Steve Martin and music group U2.' At the bottom of the program details, there are two sliders for playback control. The first slider is labeled 'Minutes' and has a value of '0'. The second slider is labeled 'Seconds' and also has a value of '0'.



What's left to do?

- User & Administrator Manual
- Testing & Debugging
- Project Video
- Project Plan Updates

