Community Driven Development and Social Networking Becomes Pervasive

Seminar
"Thesis Outline"
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18.01.2008

Agenda

- **Placement**

- **Different Scenarios**

- **Different Aspects** (Ubiquitous Computing, Social Networking, Community Driven Development)

- **Architecture / Platform**

- **Perspective**

- **Opportunities and Challenges**

Base Scenario
(Community Messenger)

- Interacting with buddies

- Leaving your position to find you

- Basics

  - Direct communication service

  - Location service

  - Server component

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Scenario (1)
(Exhibition - Indoor)

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Placement

Different Scenarios

Different Aspects:
- Ubi Comp
- Social Networking
- CDD

Architecture / Platform

Perspective

Opportunities and Challenges

- Finding the really interesting events with the help of the visitors
- Describing and rating the exhibiting companies

- Basics
  - Location service
  - Server component
  - News service
  - Description service
  - Rating service

Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 - Social Networking
 - CDD

Architecture / Platform

Perspective

Opportunities and Challenges

- Everybody has an own and a search profile

- Checking the position of the flirting people

- If they are close to each other the profiles are getting compared if they match

- Next steps: Creating a direct notification and if both accept the profile a direct connection

- Basics

  - Direct communication service

  - Location service

  - Server component

  - News service

Placement

Different Scenarios

Different Aspects:
- Ubi Comp
- Social Networking
- CDD

Architecture / Platform

Perspective

Opportunities and Challenges

- ■ Arriving at the Reeperbahn

- ■ Getting the tips of the day (clubs)

- ■ Getting the user recommendations

- ■ Getting the position of your buddies

- ■ Basics

  - ■ Location service

  - ■ Server component

  - ■ Description service

  - ■ Rating service

Summary of the Scenarios

Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 - Social Networking
 - CDD

Architecture / Platform

Perspective

Opportunities and Challenges

	Exhibition	Flirt-Machine	Reeperbahn	Community Messenger
Indoor / Outdoor	Indoor	Outdoor	Hybrid	**Hybrid**
Location-Services	Bluetooth / WLAN / Barcodes	GPS	GPS / WLAN / Bluetooth / Barcodes	**GPS / WLAN / Bluetooth / Barcodes**
Communication Service	Nice to Have	Essential (Direct)	Nice to Have	**Essential**
Description + Rating Service for Locations	Essential	Nice to Have	Essential	**Essential**
News Service	Essential	Essential	Essential	**Essential**
Server Component	Essential	Essential	Essential	**Essential**

→ One Generic Community Messenger for various Scenarios

Ubiquitous Computing
(Definition)

- Many Computers serve each person

- Opposite of virtual reality

- Forces computer to live out here in the world with people

- Difficult integration of human factors, computer science, engineering and social sciences

- "The most profound technologies are those who disappear. They weave themselves into fabric of everyday life until they are indistinguishable from it." (Mark Weiser)

Ubiquitous Computing
(in context of my scenario)

- All scenarios are realizable with a mobile device

- This device could be a mobile phone, smart phone or PDA

- Important is the natural use of these devices, because they are already integrated into everyday life

Placement

Different Scenarios

Different Aspects:
- Ubi Comp
- **Social**
  Networking
- CDD

**Architecture /
Platform**

Perspective

**Opportunities and
Challenges**

- One aspect of Web 2.0

- Tools that allow people to come together

- It consists of nodes and links which represents participants and their friendships

- Different forms of social software:

  - Instant Massaging, online role-playing games, collaborative editing tools, …

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Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 **- Social
   Networking**
 - CDD

Architecture /
Platform

Perspective

Opportunities and
Challenges

- Up to now in most cases social networking happened just in front of a desktop pc
- Bridging to the real life – now user can use this network wherever they are and whenever they want

CCD - Content
(Definition)

- **The community creates the content for itself**

- **Know How**
  - From wizards for wizards (Linux, Mozilla)
  - From wizards for everybody (Wikipedia)
  - From everybody for everybody (Second Life)

- **User Interface**
  - Wizards
  - Programmers
  - Authors

CCD - Content
(in context of my scenario)

Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 - Social Networking
 - CDD

Architecture / Platform

Perspective

Opportunities and Challenges

- Every user has the possibility to create content wherever he is and whenever he want

- Different kinds of content
  - Describing locations
  - Rating locations

- Important aspects
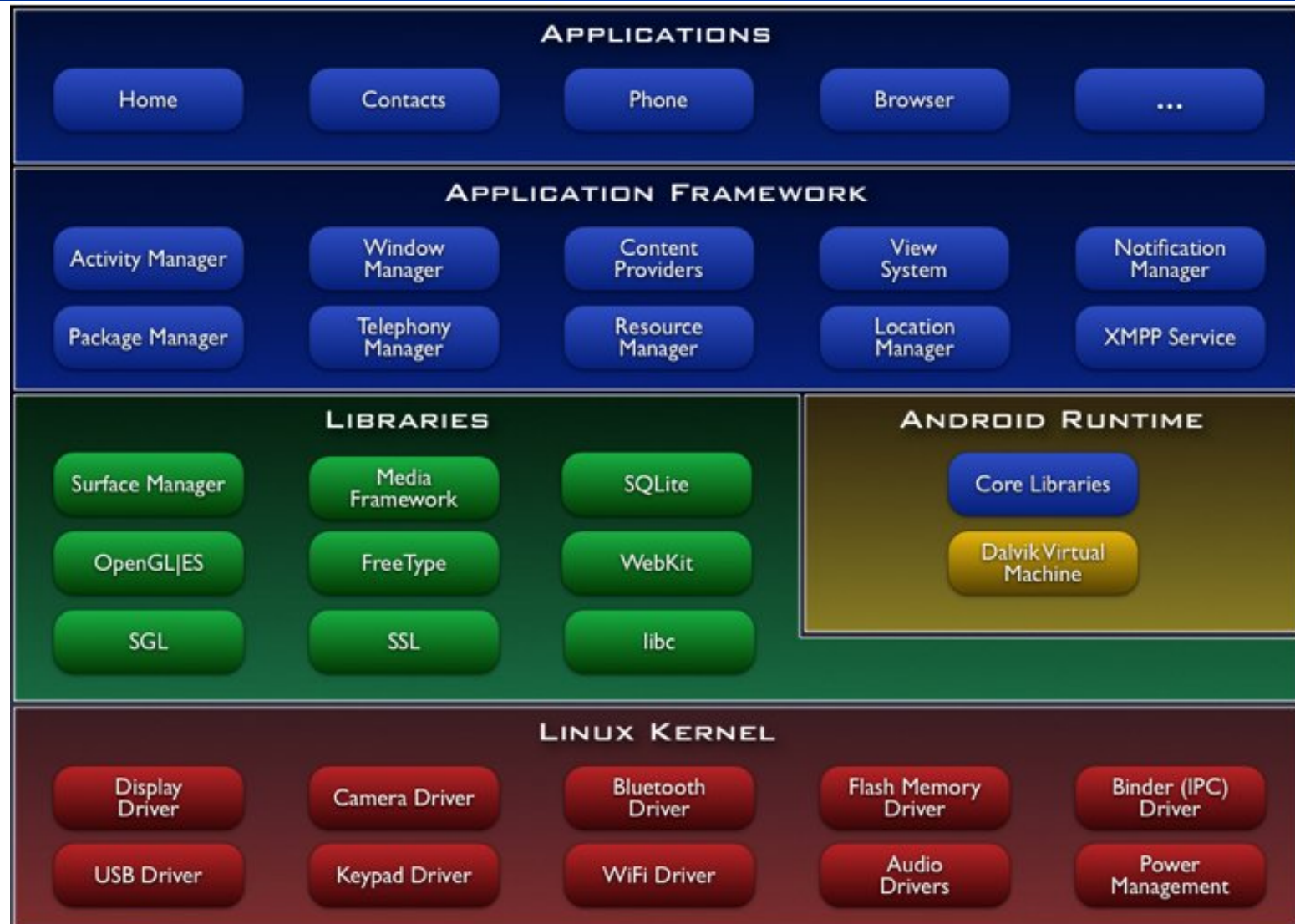 - License of the content
  - Copyright
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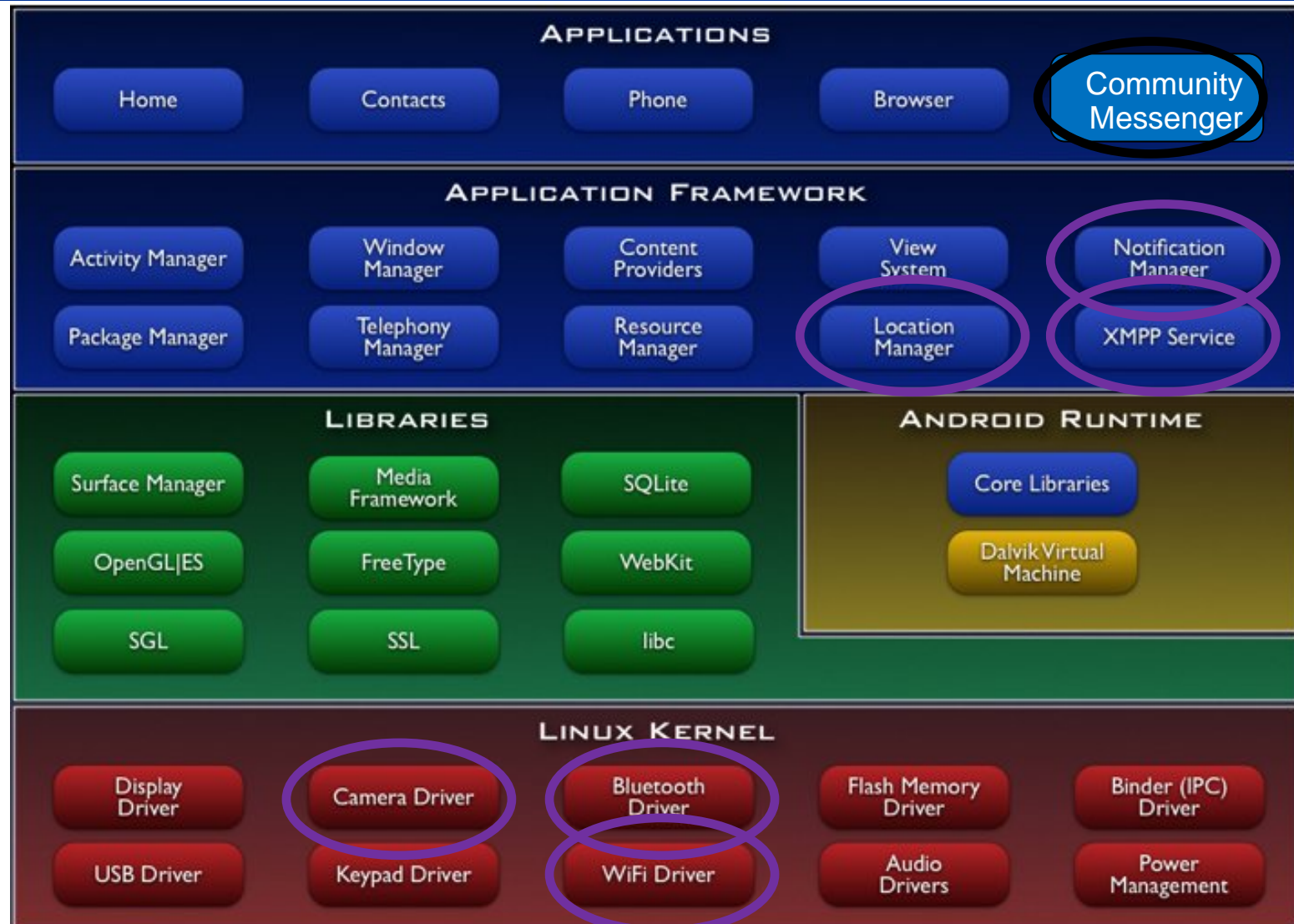
Architecture
(Android)

Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 - Social Networking
 - CDD

Architecture / Platform

Perspective

Opportunities and Challenges

Architecture
(Client – **Exhibition**)

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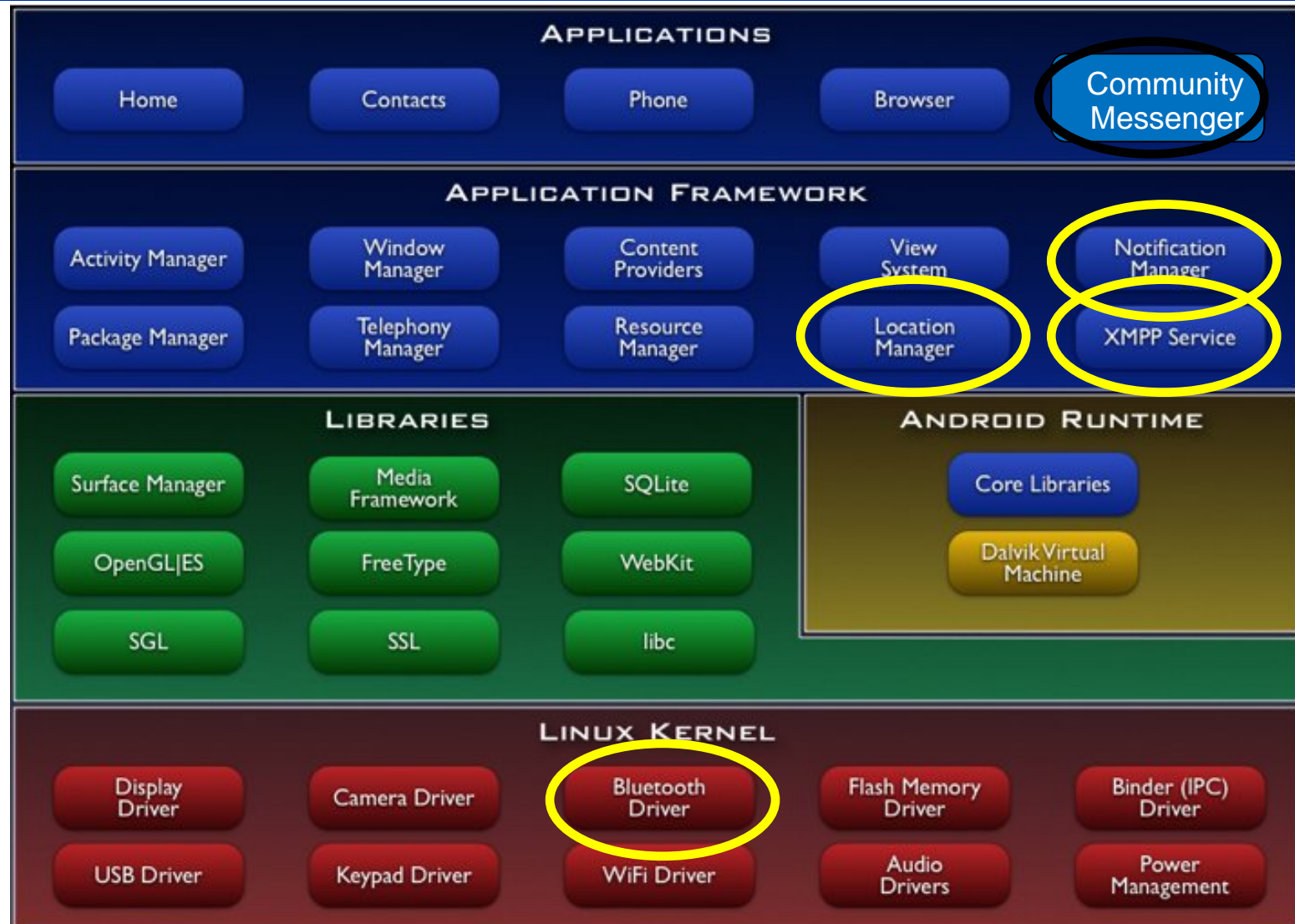Hamburg University of Applied Sciences

Placement

Different Scenarios

Different Aspects:
- Ubi Comp
- Social Networking
- CDD

**Architecture /
Platform**

Perspective

Opportunities and
Challenges

Architecture
(Client – **Flirt-Machine**)

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Placement

Different Scenarios

Different Aspects:
 - Ubi Comp
 - Social Networking
 - CDD

**Architecture /
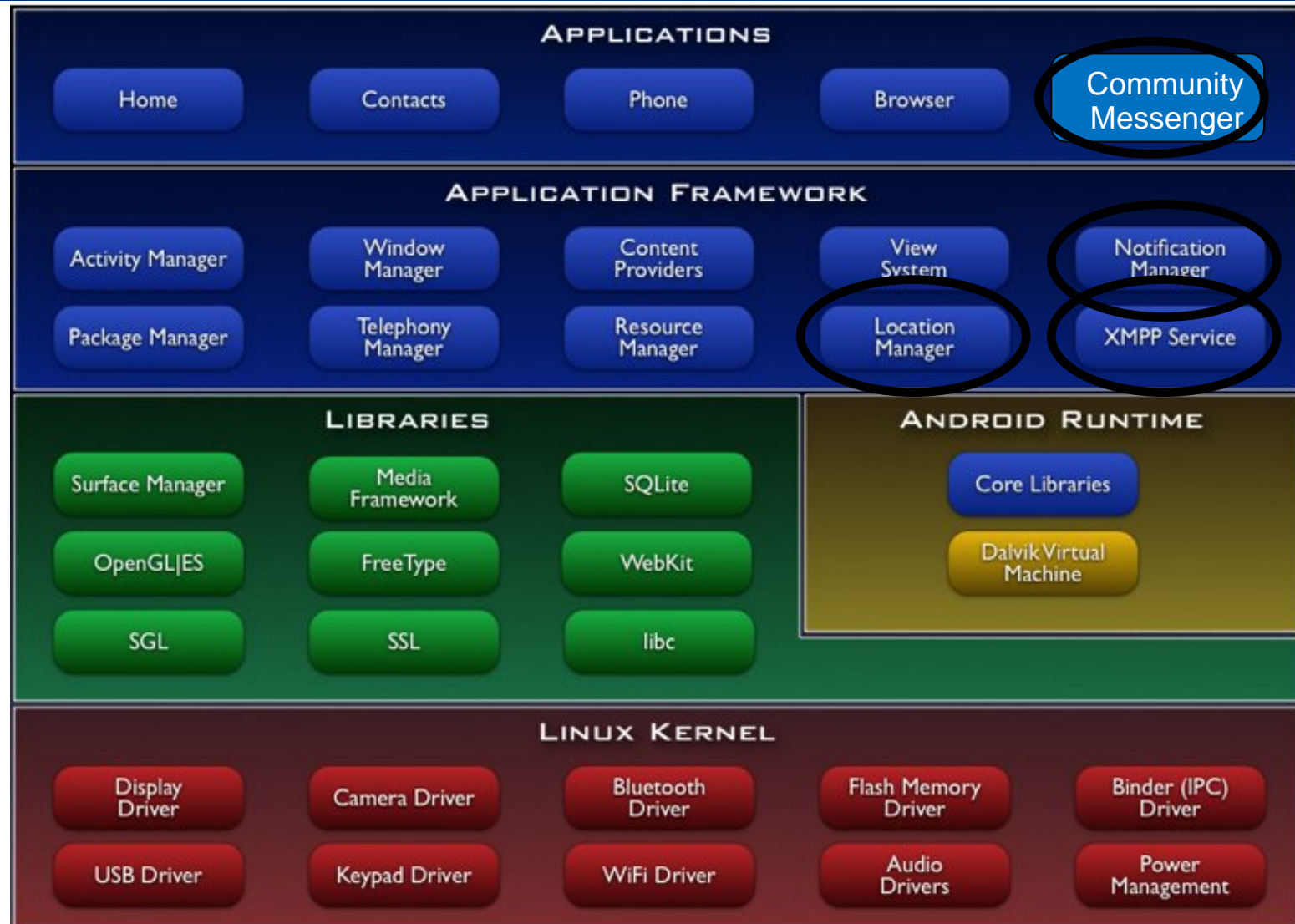Platform**

Perspective

Opportunities and
Challenges

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Placement

Different Scenarios

Different Aspects:
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 - Social Networking
 - CDD

**Architecture /
Platform**

Perspective

Opportunities and
Challenges

- **Location Manager**

  - Uses the location service which is available to find friends or buildings

- **XMPP**

  - Sends device to device - data to other users

- **Notification Manager**

  - Tells the user that something in the background has happened

- **SQLite**

  - Small Database for the mobile device

- **Activity Manager**

  - Manages the lifecycle of the applications

Neutron
(Platform – Server)

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- **My Vision: One Messenger**
  - Usable anytime and anyplace –

    a natural unobtrusive mobile phone (Pervasive)

  - Creating content whenever you want and wherever you are (Community Driven Development)

  - Making the step from the virtual community to the real life (Social Networking)

  - Using a completely new platform (Android)

- **Android Developer Challenge**

Opportunities and Challenges

- **Opportunities**
  - Creating something completely new
    - Transport CDD in a pervasive context
    - Bridge from virtual social networking to real life social networking
    - Using a new platform (Android)

- **Challenges**
  - Creating something completely new
  - Using an SDK in a non-final version
  - Using an emulator – because the hardware still does not exist

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Thanks – Any Questions?