

The Design of a Unified Java API for Extracting Social Network Data

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Objectives

- To provide a universal API that may be used to extract data from multiple social networks
 - i.e. twitter searches, users, geolocation, etc
- To save data in relational databases or document databases
- A Uniform Java API for all social networks

Why Universal API?

- ◆ Application Portability
- ◆ Universal Programming Paradigm for Social Networks
- ◆ A consistent and uniform programming paradigm for Java developers to access social network data

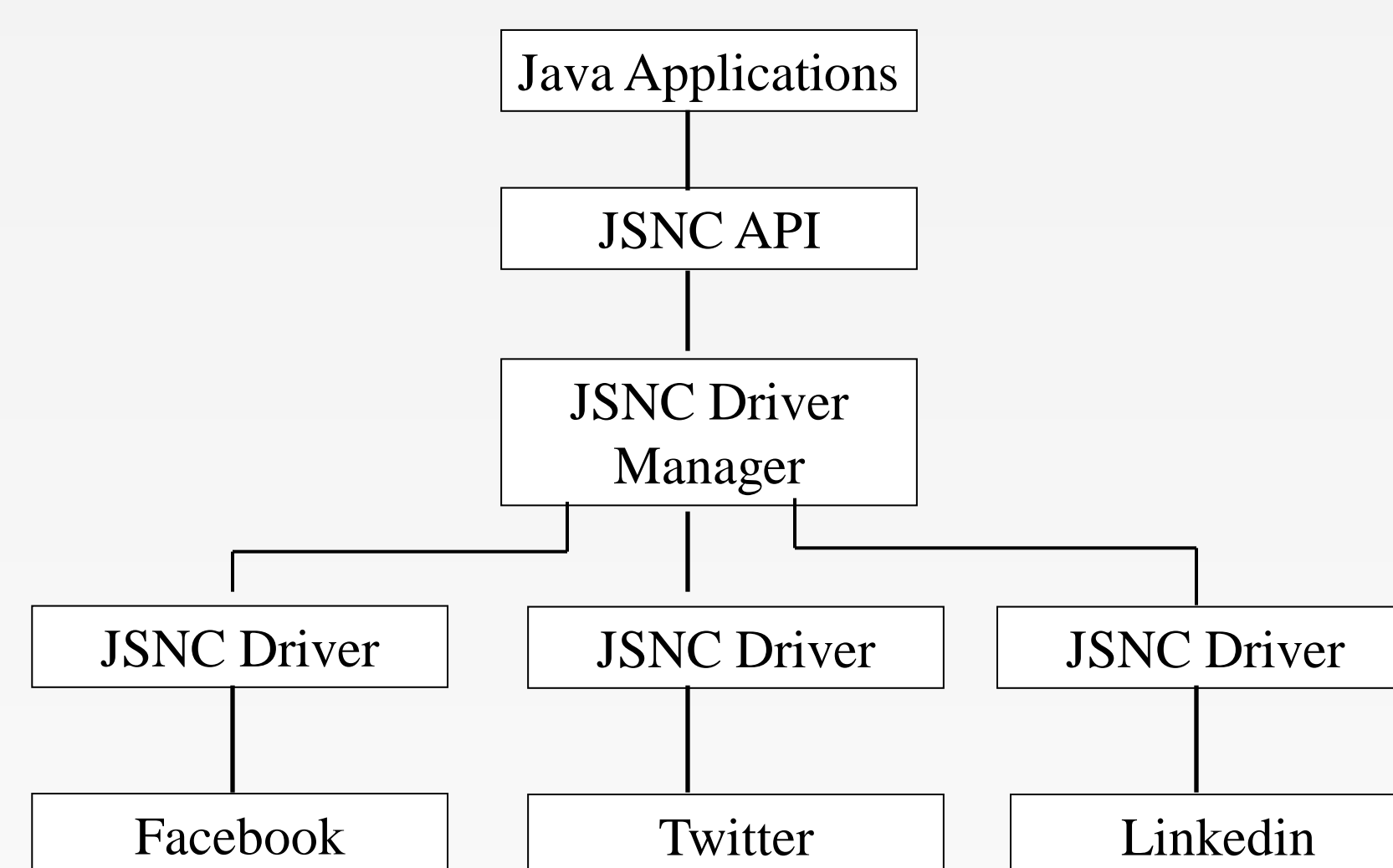
Existing Java APIs for Social Networks

- Twitter
 - Twitter4J, etc
- Facebook
 - RestFB, Spring Social, etc.
- LinkedIn
 - LinkedIn-j

What is JSNC?

- Java Social Network Connectivity
- A universal API for accessing social networks from Java Applications
- The programming paradigm is modelled after JDBC: Java Database Connectivity

JSNC Architecture



JSNC and JSNC Drivers

- JSNC is a specification for accessing social networks
- Java Interfaces and Classes are defined in JSNC
- The interfaces and classes are implemented in JSNC drivers
 - each of which is for a particular social network only

Major JSNC Classes and Interfaces

- DriverManager
- Driver
- Connection
- Request
- Filter
- Response

Implementing JSNC Drivers

- JSNC Drivers can be implemented in two approaches
 - Java Wrapper on top of existing APIs, such as Twitter4J, RestFB, etc.
 - Pure Java implementation from scratch

Project Status and Future Work

- JSNC is still an on-going effort
 - The draft of JSNC specification is being drafted and finalized
 - The JSNC drivers for Twitter and Facebook are being implemented. The initial implementation will be Java Wrappers.