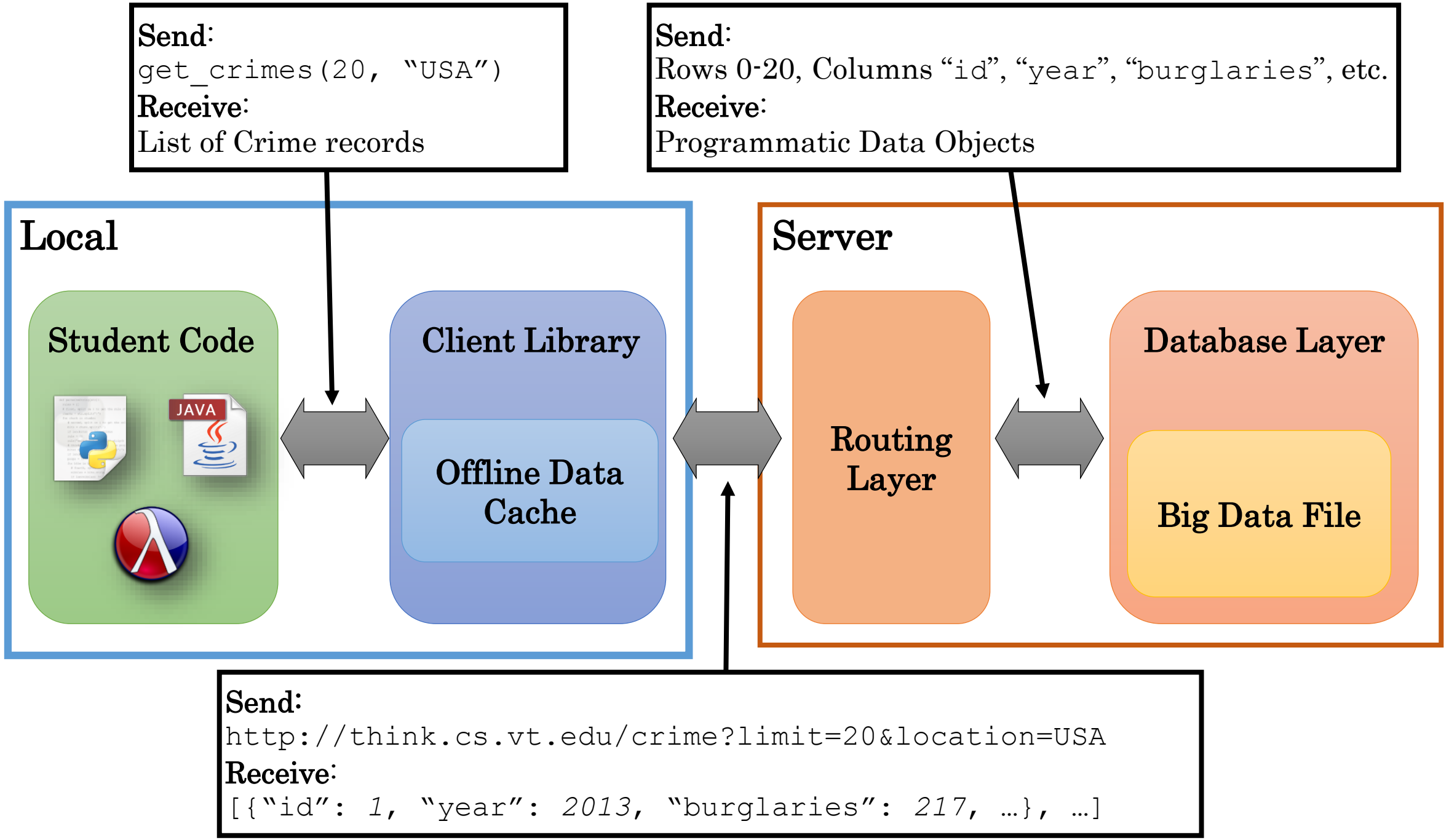
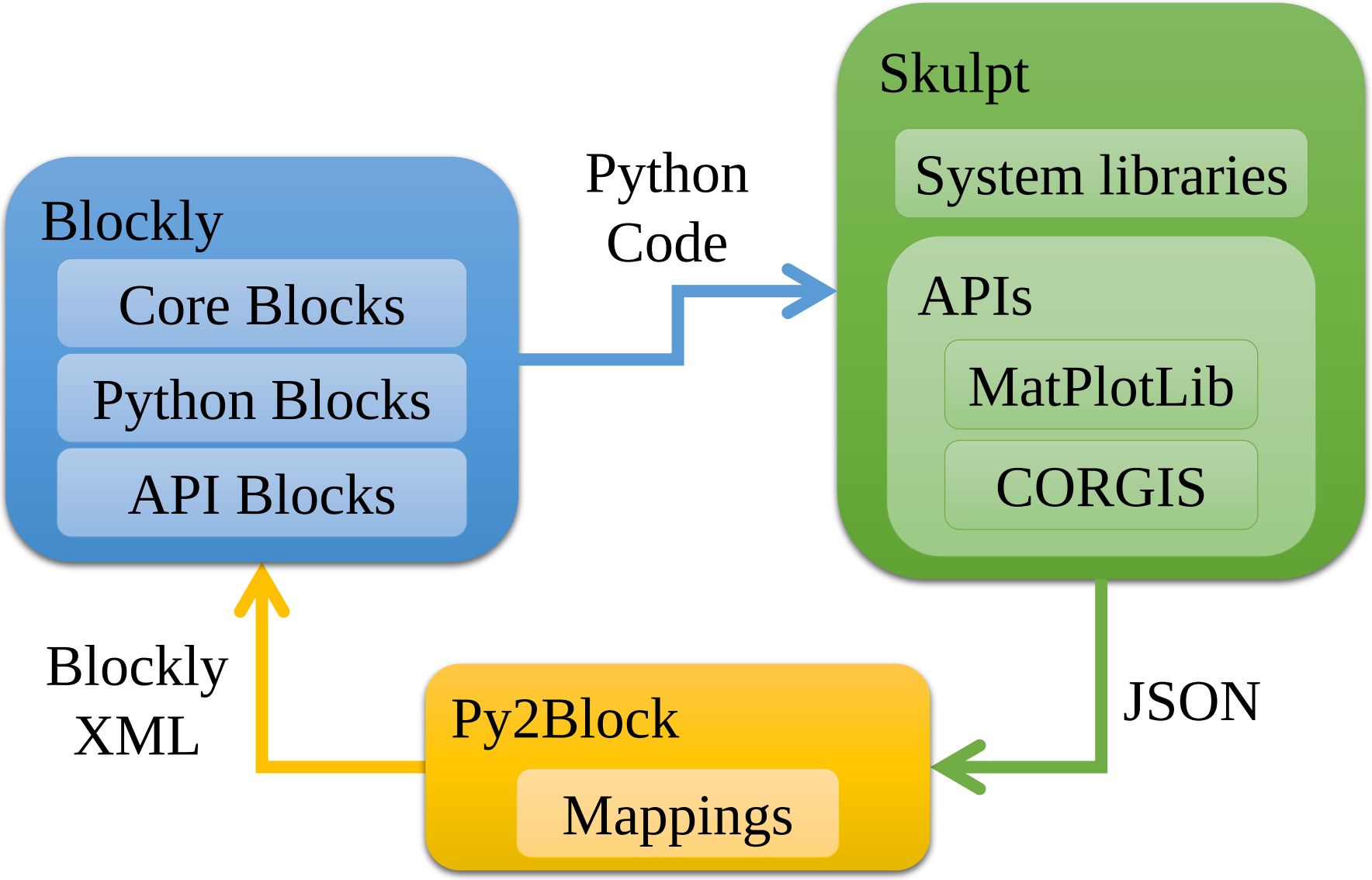
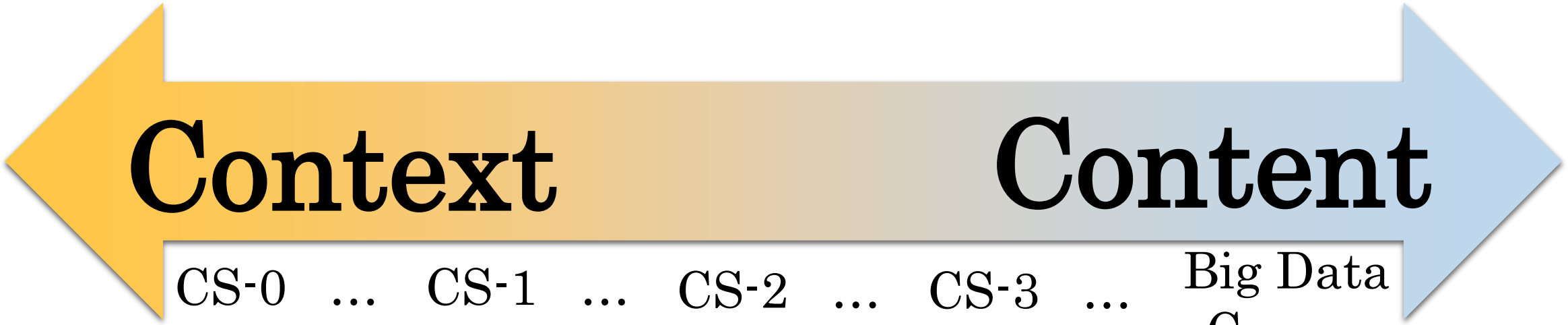

Send:
get_crimes(20, "USA")
Receive:
List of Crime records
Send:
Rows 0-20, Columns "id", "year", "burglaries", etc.
Receive:
Programmatic Data Objects
Local
Student Code
JAVA
Client Library
Offline Data Cache
Server
Routing Layer
Database Layer
Big Data File
Send:
http://think.cs.vt.edu/crime?limit=20&location=USA
Receive:
[{"id": 1, "year": 2013, "burglaries": 217, …}, …]

```
<?xml version="1.0"?>
<xml xmlns="http://www.w3.org/1999/xhtml">
<block type="controls_forEach" id="38" inline="false" x="-58" y="37">
    <field name="VAR">quake</field>
    <value name="LIST">
        <block type="earthquake_get" id="57">
            <field name="PROPERTY">magnitude</field>
        </block>
    </value>
    <statement name="DO">
        <block type="text_print" id="82" inline="false">
            <value name="TEXT">
                <block type="variables_get" id="83">
                    <field name="VAR">quake</field>
                </block>
            </value>
        </block>
    </statement>
</block>
</xml>
```


Skulpt
System libraries
APIs
MatPlotLib
CORGIS
Blockly
Core Blocks
Python Blocks
API Blocks
Python
Code
Blockly
XML
Py2Block
Mappings
JSON



- Primarily Motivational
- "Frame Story"
- Example: *Use a simple for loop to iterate over a list of 20 weather reports and find the average temperature.*

- Primarily Cognitive
- Assessed Information
- Example: *You have 20 gigabytes of weather reports, how can you find the average temperature efficiently?*