

TEAM NAME : COMPETITIVE DEVELOPERS



JOLT

TRANSFORMATION

JSON TO JSON TRANSFORMATION LIBRARY

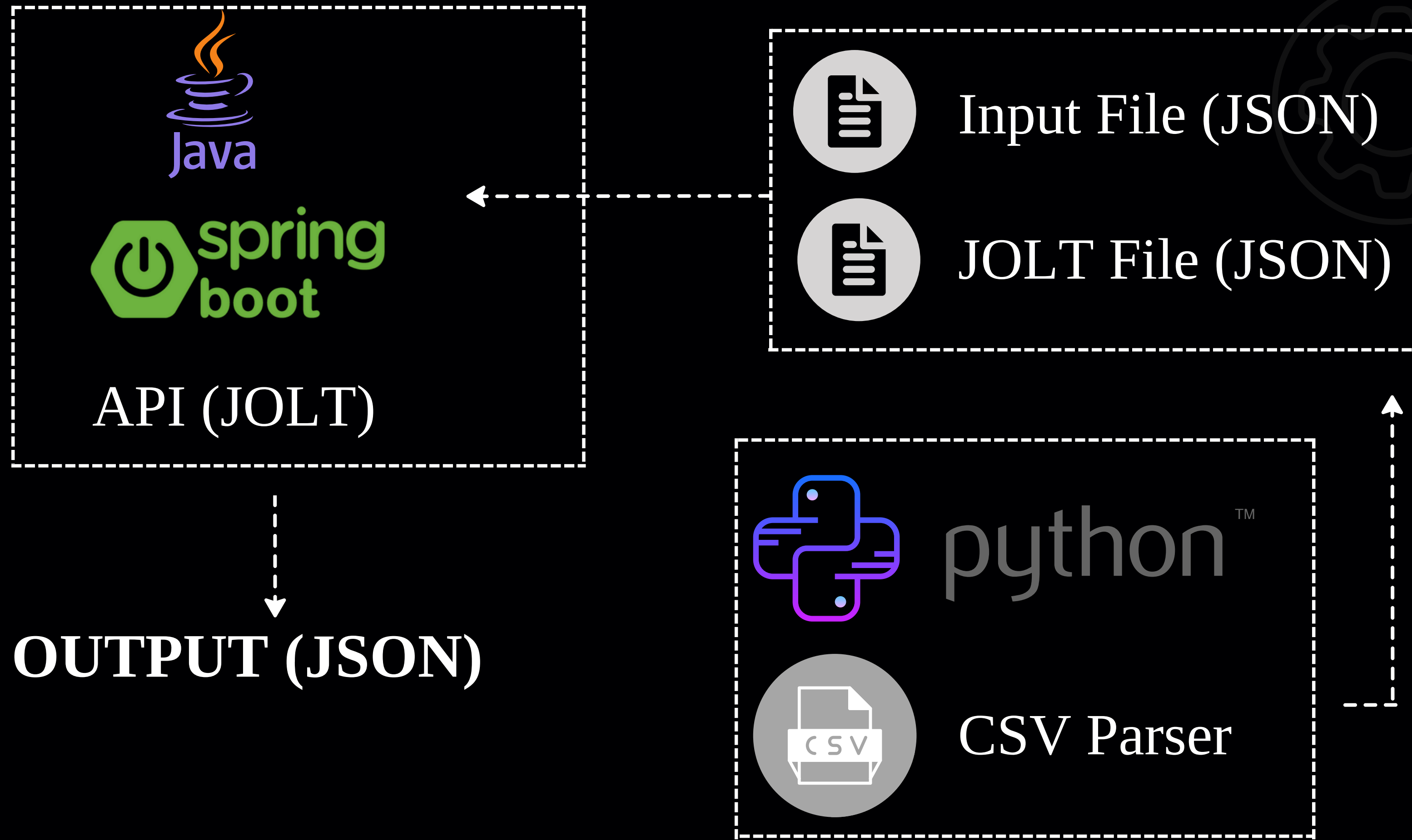
LOADING...



WHY THIS PROBLEM?

Basic motivation behind choosing this topic was that we all wanted to solve such problem as it was quite unique, interesting and somehow a challenging problem . Because It not only provide us exposure to the JSON transformation but also give an idea how to solve such an amazing problem in such a short duration and maximize our learnings through this competitive hackathon.

ARCHITECTURE



main.py

```
import csv
import json

def shift(file, data):
    data["operation"] = "shift"

    n = len(file)
    content = {}
    for i in range(n):

        if (len(file[i][2]) == 2):
            if "+" not in file[i][1]:
                dot_split = file[i][1].split(".")
                dot_split = dot_split[1:]

            if len(dot_split) == 1:
                content[file[i][0]] = dot_split[0]
            else:
                dot_copy = dot_split
                dot_copy.reverse()

                past = {}
                past[dot_split[0]] = row[1]
                cur = {}
                dot_split = dot_split[1:]

                for x in dot_split:
                    cur[x] = past
                    past = cur

            # print(past)
            for x in past:
                content[x] = past[x]
```

mapping.csv

```
1 No.,Target, Source, Enumeration
2 1, SSN, .id, -
3 2, CustomerFullName, .firstName +
  .lastName, -
4 3, CustomerAddress, .address.street +
  .address.suite, -
5 4, CustomerCity, .address.city, -
6 5, CustomerZipCode, .address.zipcode, -
7 6, CustomerProfession,
  ENUM(.occupation), {"self-employed":
  "SELF","", "salaried": "FIXED INCOME","",
  "other": "MISC"}
8 7, CustomerAge, .age, -
9
```

mapping.json

```
1 [
2   {
3     "operation": "shift",
4     "spec": {
5       "SSN": "id",
6       "address": {
7         "city": " CustomerCity",
8         "zipcode": " CustomerAge"
9       },
10      " CustomerAge": "age"
11    }
12  ]
13
```


demo

- src/main/java
 - com.bazaarvoice.jolt.sample
 - JoltSample.java
 - spec.json
 - com.joltspec.demo
 - JoltSpecApplication.java
- src/main/resources
 - jsonfiles
 - input.json
 - spec.json
 - static
 - templates
 - application.properties
- src/test/java
- JRE System Library [JavaSE-18]
- Maven Dependencies
- src
- target
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- > jolt-demo [jolt-transformation-d

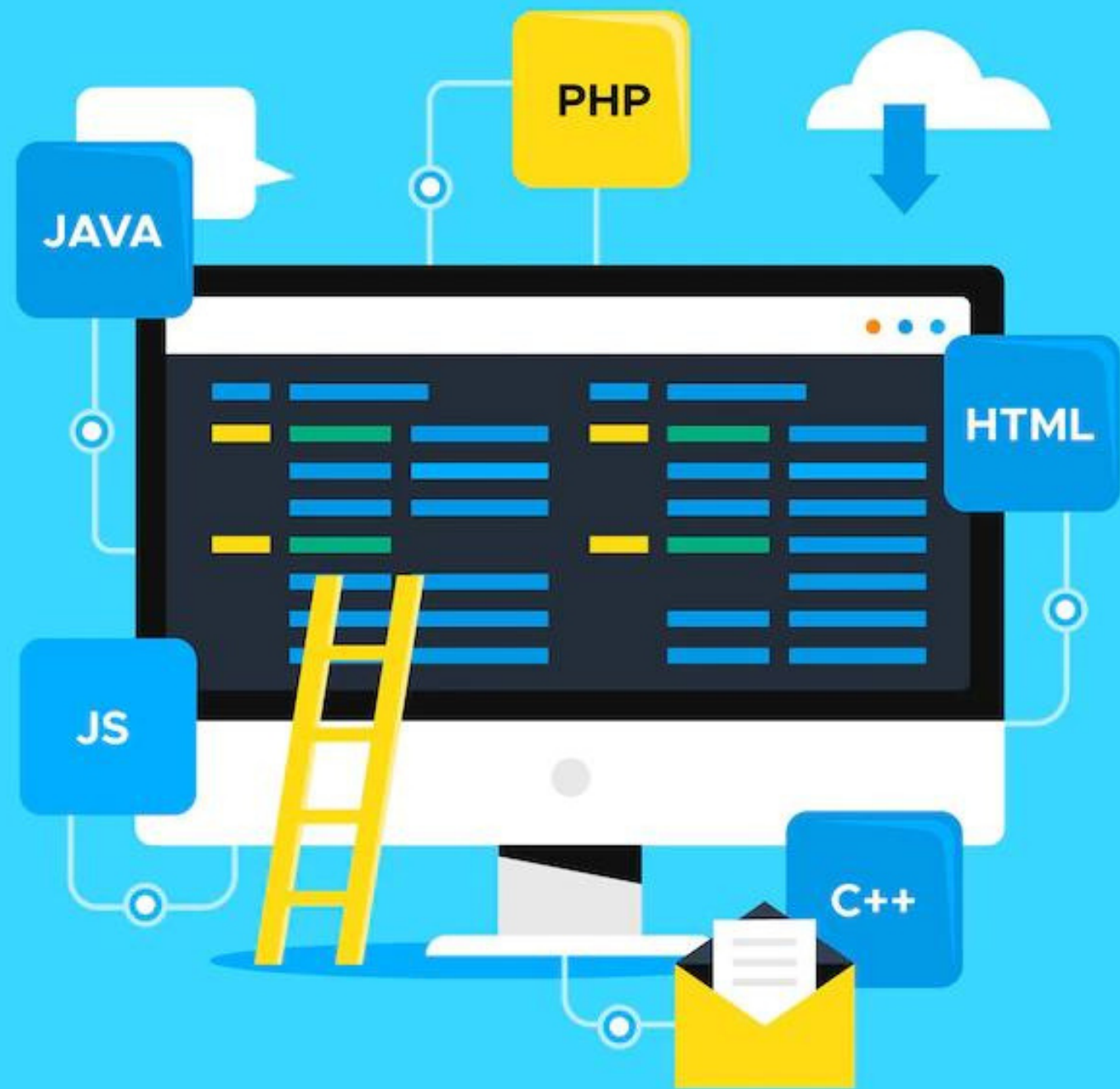
```
1 package com.bazaarvoice.jolt.sample;
2 import com.bazaarvoice.jolt.Chainr;
7 public class JoltSample {
8
9     public static void main(String[] args) throws IOException {
10         List chainrSpecJSON = JsonUtils.classpathToList( "/jsonfiles/spec.json" );
11
12         Chainr chainr = Chainr.fromSpec( chainrSpecJSON );
13
14         Object inputJSON = JsonUtils.classpathToObject( "/jsonfiles/input.json" );
15         Object transformedOutput = chainr.transform( inputJSON );
16         System.out.println( JsonUtils.toJsonString( transformedOutput ) );
17     }
18
19 }
20
```

Generated JSON

Problems Javadoc Declaration Console ×

<terminated> JoltSample [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (25-Nov-2022, 5:39:05 am – 5:39:10 am) [pid: 21252]

```
{"Rating":3,"SecondaryRatings":{"quality":{"Id":"quality","Value":3,"Range":5}},"Range":5}
```



TECHNOLOGIES USED

PYTHON

SPRINGBOOT

JAVA

WHAT WE LEARNT DURING OUR ENTIRE HACKATHON?



- Understanding how does parser works
- Learnt Java and Springboot on the go.
- Work division and coordination
- Work pressure handling
- Exposure to an offline hackathon



THANK YOU

Team Members:

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