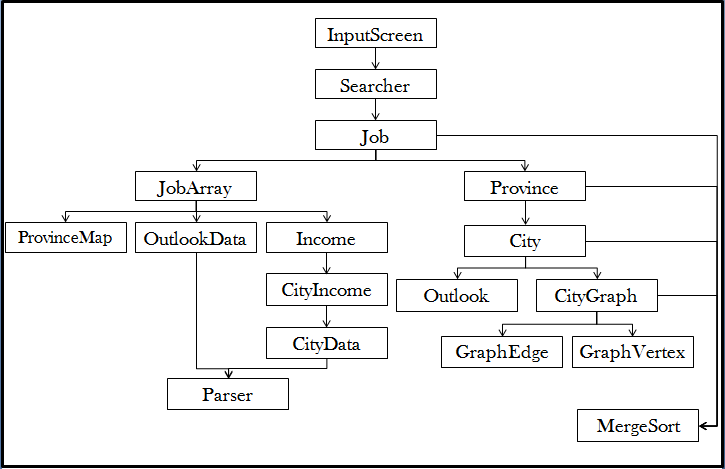
UML Diagram



: See Expanded Classes Below

1. Input Screen:

|  |
| --- |
| InputScreen |
| frame: Jframe |
| panel: Jpanel |
| label: Jlabel |
| textName: JTextField |
| textProvince: JTextField |
| textIncome: JTextField |
| textArea: JTextArea |
| button: Jbutton |

1. Searcher:

|  |
| --- |
| Searcher |
| jobsFetcher: jobArray |
| jobs: ArrayList<Job> |
| searchCity(String jobName) |
| searchProvinceCity(String jobName, String provinceCode) |
| searchIncomeCity(String jobName, String provinceCode, String aveIncome) |

1. Job:

|  |
| --- |
| Job |
| name: String |
| provinces: ArrayList<Provinces> |
| getName() |
| getProvinces() |
| addOutlook(Province province, City city, int potential, String trend) |
| getPotential(Province province, City city) |
| getAvgPotential(Province province) |
| getCities() |
| getCities(Province province) |
| searchJob(ArrayList<Job> jobs) |
| sortProvinces() |
| sortCity() |
| equals(Object that) |
| toString() |

1. JobArray:

|  |
| --- |
| JobArray |
| jobs: ArrayList<Job> |
| incomeFetcher: Income |
| income: ArrayList<CityIncome> |
| map: ProvinceMap |
| toJob |
| getJobArray() |

1. Province:

|  |
| --- |
| Province |
| provinceCode: String |
| avgPotential: double |
| provinceIncome: double |
| job: Job |
| cities: ArrayList<City> |
| provinceTrends: ArrayList<String> |
| getProvinceCode() |
| getJob() |
| getAvgPotential() |
| getCities() |
| getProvinceTrends() |
| getProvinceName() |
| getProvinceIncome() |
| setProvinceIncome(double provinceIncome) |
| addOutlook(City city, int potential, String trend) |
| getPotential(City city) |
| searchProvince(ArrayList<Province> provinces) |
| sortCities() |
| compareTo(Object thatP) |
| toString() |

1. ProvinceMap:

|  |
| --- |
| ProvinceMap |
| f: String |
| forward: Map<String, String> |
| backward: Map<String, String> |
| add(String key, String value) |
| getForward(String key) |
| getBackward(String key) |

1. OutlookData:

|  |
| --- |
| OutlookData |
| Title: String |
| CPP: String |
| Trends: String |
| TrendsDate: String |
| Lang: String |
| ProvAbbr: String |
| Location: String |
| potential: int |
| code: int |
| provID: int |
| NOC: int |
| cityID: int |
| getNOC() |
| getCode() |
| getCPP() |
| getLang() |
| getLocation() |
| getPotential() |
| getProvAbbr() |
| getProvID() |
| getTitle() |
| getTrends() |
| getTrendsDate() |
| getCityID() |

1. Income:

|  |
| --- |
| Income |
| cities: ArrayList<CityIncome> |
| toCityIncome(CityData[] c) |
| searchCity(String cityName) |
| getCities() |

1. City:

|  |
| --- |
| City |
| cityName: String |
| province: Province |
| cityOutlook: Outlook |
| income: double |
| getCityName() |
| getProvince() |
| getOutlook() |
| setOutlook() |
| searchCity(ArrayList<City> cities) |
| compareTo(Object that) |
| getIncome() |
| toString() |

1. CityIncome:

|  |
| --- |
| CityIncome |
| cityName: String |
| province: String |
| incomes: ArrayList<Double> |
| avgIncome: double |
| getCityName() |
| getIncomes() |
| addIncome(double income) |
| getAvgIncome() |

1. Outlook:

|  |
| --- |
| Outlook |
| potential: int |
| trend: String |
| city: City |
| getPotential() |
| getTrend() |
| getCity() |
| toString() |

1. CityGraph:

|  |
| --- |
| CityGraph |
| SCALING\_FACTOR: double |
| CITIES\_TO\_RETURN: int |
| crawlDummies(GraphVertex source, double targetValue) |
| getRelatedCities(City toFind) |

1. CitaData:

|  |
| --- |
| CityData |
| year: int |
| city: String |
| province: String |
| GeographicalID: String |
| DataType: String |
| Vector: String |
| Coordinate: double |
| Income: double |
| getCoordinate() |
| getDataType() |
| getGeographicalID() |
| getProvince() |
| getCity() |
| getIncome() |
| getVector() |
| getYear() |

1. GraphEdge:

|  |
| --- |
| GraphEdge |
| v: GraphVertex |
| w: GraphVertex |
| weight: long |
| getConnection(GraphVertex c) |
| getWeight() |
| compareTo(Object oThat) |

1. GraphVertex:

|  |
| --- |
| GraphVertex |
| city: City |
| outlook: double |
| adj: ArrayList<GraphEdge> |
| connect(GraphVertex other, long weight) |
| getAdj() |
| getCityName() |
| getCity() |
| getOutlook() |

1. Parser:

|  |
| --- |
| Parser |
| outlookName: String |
| incomeName: String |
| getOutlookDataArray() |
| getCityDataArray() |

1. MergeSort:

|  |
| --- |
| MergeSort |
| aux: ArrayList<Comparable> |