Codificação: Mariana Cristina Lena Silva - SP3065677 - 2138

*Diagrama 1

```
public interface Collection {
    public void equals (){
    }
    public void add(){
    }
}

public interface List extends Collection{
    public String getList(){
    return list;
    }
}

public class Pedido depends List {
    public String Itens_de_linha;
}

public abstract AbstractList implements List{
    public void equals(){
    }
    public void add(){
    }
    public abstract String AbstractList(){
    return AbstractList;
    }
}

public class ArrayList extends AbstractList{
    public String getArrayList(){
    return ArrayList;
    }
    public void add(){
    }
}
```

*Diagrama 2

```
public class Project{
    private String name;
    private String description;
    private Source[] source;
    private ReferenceSequence[] referenceSequence;
    private Feature[] feature;
    private Alignment[] alignment;
}

public class Source{
    private String name;
    private Sequence[] sequence;
}

public class Sequence{
    private String sequence_id;
    private String format;
}

public class ReferenceSequence{
    private String name;
    private String displayName;
    private FeatureLocation[] featureLocation;
}

public class FeatureLocation{
    private FeatureSegment[] featureSegment;
    private Variation[] variation;
}

public class Feature{
    private String name;
    private String displayName;
    private String description;
}
```

```
public class FeatureSegment {
    private String refStart;
    private String refEnd;
}

public class Variation {
    private String name;
    private String displayName;
    private String description;
    private String scannerModuleName;
    private String translationType;
    private PatternLocation[] patternLocation;
}

public class PatternLocation {
    private String refStart;
    private String refEnd;
    private String pattern;
}

public class AlignmentMember {
    private String referenceMember;
    private AlignedSegment[] alignedSegment;
}

public class AlignedSegment {
    private String refStart;
    private String refEnd;
    private String memberStart;
    private String memberEnd;
}

public class Alignment {
    private String name;
    private String displayName;
    private String description;
    private AlignmentMember[] alignmentMember;
}
```

*Diagrama 3:

```
public class Population {
        public string race;
        public string ethnicity;
        public string primary_language;
        public string language_family;
}

public class Panel extends Population {
        public long size;
        public string count_unit;
        public boolean pooled;
        public string type;
        public Individual [] individual;
}

public class Individual extende Population {
        public string father_id;
        public string mother_id;
        public string sex;
        public string birth_day;
        public int death_date;
}

public class Geographic_location {
        public double max_longitude;
        public double max_latitude;
        public double min_longitude;
        public double min_latitude;
}

public class Taxon {
        public string rank;
        public strina scientific_name;
}
```

```
public class Molecular_sample {
        public string molecule;
}

public class Anatomic_location {
}
```