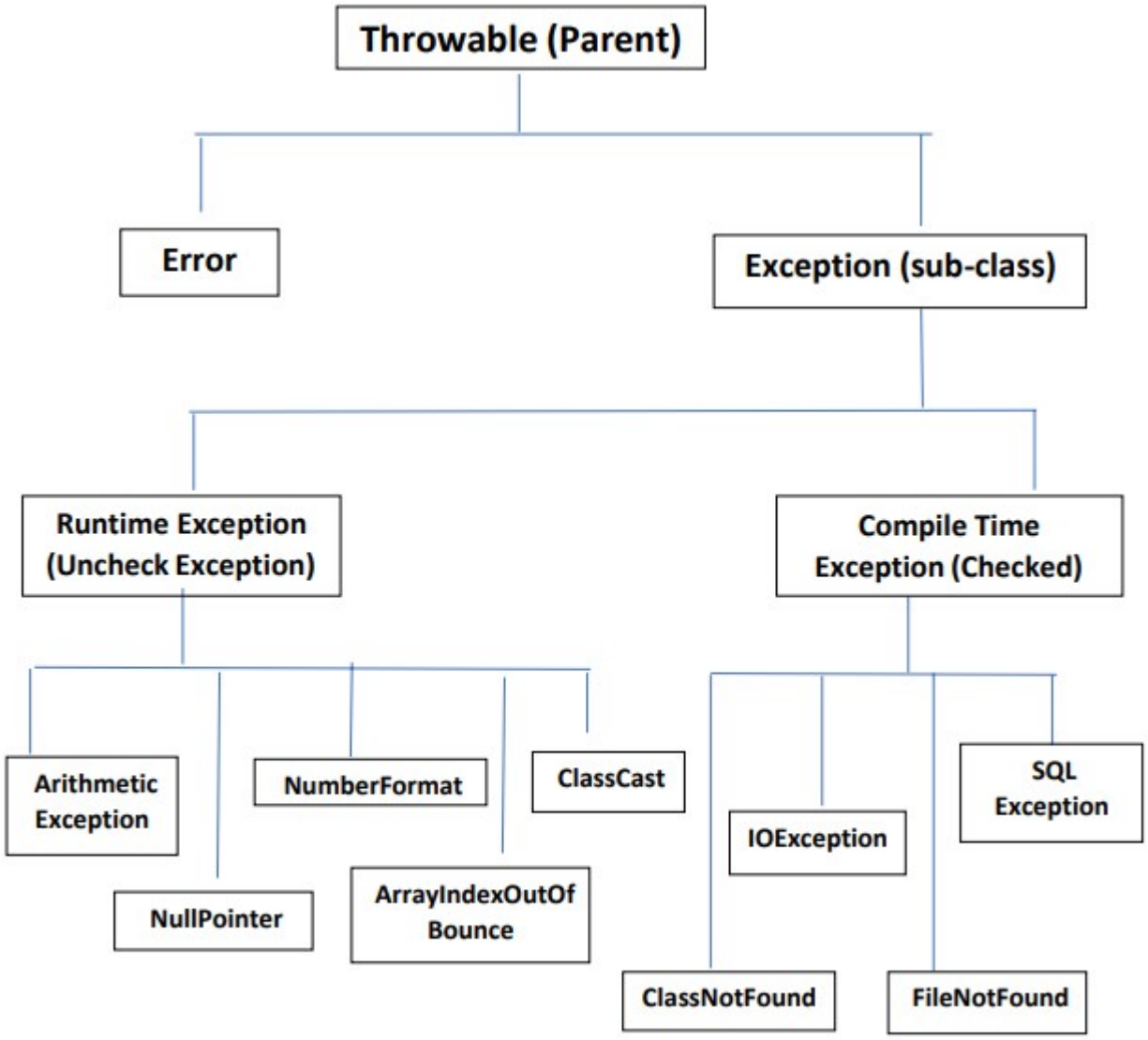
EXCEPTIONS



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- CHECKED EXCEPTION: Compile time/ checked exception happens to occur when dot java file in converted to dot class file.

- UNCHEKED EXCEPTION: Run time exception occur when we are running dot class file.

- AIRTHMATICEXCEPTION : Whenever invalid mathematical operation is performed, we get ArithmeticException and ArithmeticException class handle the particular exception.

```
public class A {
public static void main(String[] args) {
    try {
        int x=10;
        int y = 0;
        int z = x/y;
        System.out.println(z);
        System.out.println(100);
    } catch (ArithmeticException e) {
        System.out.println(e);
        e.printStackTrace();

    }
    System.out.println("Welcome");
}}
```

- NUMBERFORMATEXCEPTION : In valid string to number converser in done then it gives NumberFormat Exception.

```
public class B {
  public static void main(String[] args) {

      try {
          String x = "10abcd"; // alpha numeric

          int y = Integer.parseInt(x);
          System.out.println(y);
      } catch (NumberFormatException e) {
          e.printStackTrace();
      }
      System.out.println(100);
  }}
```

- NULLPOINTEREXCEPTION : With the Null reference variable, when you access non-static members, it gives NullPointerException.

```
public class A {
    static A a1; // null
    int x = 10; //non-static
    public static void main(String[] args) {
        try {
            System.out.println(a1.x);
```

```
        } catch (NullPointerException e) {
            e.printStackTrace();
        }
        System.out.println(100);
    }}
```

- ARRAYOUTOFBOUNDEXCEPTION : An array can store multiple values. If array out of store value, then error occurs.

```
    public class A {
      public static void main(String[] args) {

          int [] arr = new int[3];
          arr[0]=10;
          arr[1]=20;
          arr[2]=30;
          arr[3]=40; // ArrayIndexOfBoundsException

      }}
```