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| Exception  A diagram of a flowchart  Description automatically generatedThrowable | -Unwanted event that interrupts the normal flow of your program  -Errors and Exception  -Not recommended to catch Errors  Checked (Compile) vs Unchecked (Runtime)  -can use try/catch or throws (don’t want to handle it here) for checked |
| try  catch  finally | Multicatch  catch (Exception1 | Expection2 e)  Finally  -will always run  -return in finally will override return in try |
| POJO  Java Bean | -can’t extend (child class) or implement interfaces, no outside annotations  -Basically means doesn’t need any outside libraries to use it  -no args constructor, properties are private, Getters/Setters, serializable (implements Serializble interface) tells Java this can be written to DB and files |
| Inner Class | -To avoid creating OuterClass instance, make the inner class static |
| Multithreading | -Multiple different path of code at the same time  A black background with yellow and white text  Description automatically generated  1. extends Thread & @Override run()  -Don’t have to call Thread Object    2. implement Runnable @Override run()  -Can extend another class |
| Abstract vs Interface | Both: enforces sub classes what to have  Abstract (extends)  -have constructors  Interface (implements)  -fields are public, static and final so must instantiate |
| Upcasting & Downcasting  A diagram of a parent versus child  Description automatically generated | Up: typecasting from a child OBJ to a parent OBJ (implicit), always works  -access parent class members but not child unless overridden    Down: typecasting from a parent t child (explicit) |
| Enums | -Predefined set of values that don’t change  -enum extends Enumeration class    A close up of a sign  Description automatically generated |
| Generic Classes <T>  Serializable is an interface | -Can store everything but noy type safe    -Only classes that extends Animal can use it  -Still use extends for interfaces    -use & but only one class and list it first |
| Generic Method  Wildcard | A black and white text  Description automatically generated  -Right before return type, put the generic type in <>    -Use a wildcard for List  -Also can bound it as well  -Can’t use List<Object> as a parameter even though it’s a everything is a sub class |
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