Java Reflection API Summary
Fall 2021 – CPSC 501

java.lang.Object

- `public Class getClass()`

- `public String toString()`

- `public int hashCode()`

- `public boolean equals(Object obj)`

java.lang.Class

- `public Class forName(String classname)`

- `public Class getComponentType()`

- `public Constructor[] getConstructors()`

- `public Constructor[] getDeclaredConstructors()`

- `public Constructor getConstructor(Class[] parameterTypes)`

- `public Constructor getDeclaredConstructor(Class[] parameterTypes)`

- `public Field[] getFields()`

- `public Field[] getDeclaredFields()`

- `public Field getField(String name)`

- `public Field getDeclaredField(String name)`

- `public Method[] getMethods()`

- `public Method[] getDeclaredMethods()`

- `public Method getMethod(String name, Class[] parameterTypes)`

- `public Method getDeclaredMethod(String name, Class[] parameterTypes)`

- `public String getName()`

- `public int getModifiers()`

- public Class getSuperclass()

- public Class[] getInterfaces()

- public boolean isArray()

- public boolean isInstance(Object obj)

- public boolean isInterface()

- public boolean isPrimitive()

- public Object newInstance()

java.lang.reflect.Method

- public String getName()

- public Class getDeclaringClass()

- public Class[] getExceptionTypes()

- public Class[] getParameterTypes()

- public Class getReturnType()

- public int getModifiers()

- Object invoke(Object obj, Object[] args)

java.lang.Field

- public String getName()

- public Class getDeclaringClass()

- public Class getType()

- public int getModifiers()

- public Object get(Object obj)

- public boolean getBoolean(Object obj)

- public int getInt(Object obj)

- public double getDouble(Object obj)

- public void set(Object obj, Object value)

- public void setBoolean(Object obj, boolean value)

- public void setInt(Object obj, int value)

- public void setDouble(Object obj, double value)

java.lang.Constructor

- public String getName()

- public Class getDeclaringClass()

- public Class[] getExceptionTypes()

- public Class[] getParameterTypes()

- public int getModifiers()

- Object invoke(Object obj, Object[] args)

java.lang.Modifier

- public static boolean isPublic()

- public static boolean isProtected()

- public static boolean isPrivate()

- public static boolean isAbstract()

- public static boolean isStatic()

- public static boolean isFinal()

- public static String toString(int mod)

java.lang.Array

- public static Object newInstance(Class componentType, int length)

- public static int getLength(Object array)

- public static Object get(Object array, int index)

- public static boolean getBoolean(Object array, int index)

- public static int getInt(Object array, int index)

- public static double getDouble(Object array, int index)

- public static void set(Object array, int index, Object value)

- public static void setBoolean(Object array, int index, boolean value)

- public static void setInt(Object array, int index, int value)

- public static double setDouble(Object array, int index, double value)

author: jcleahy@ucalgary.ca