Adapter Pattern

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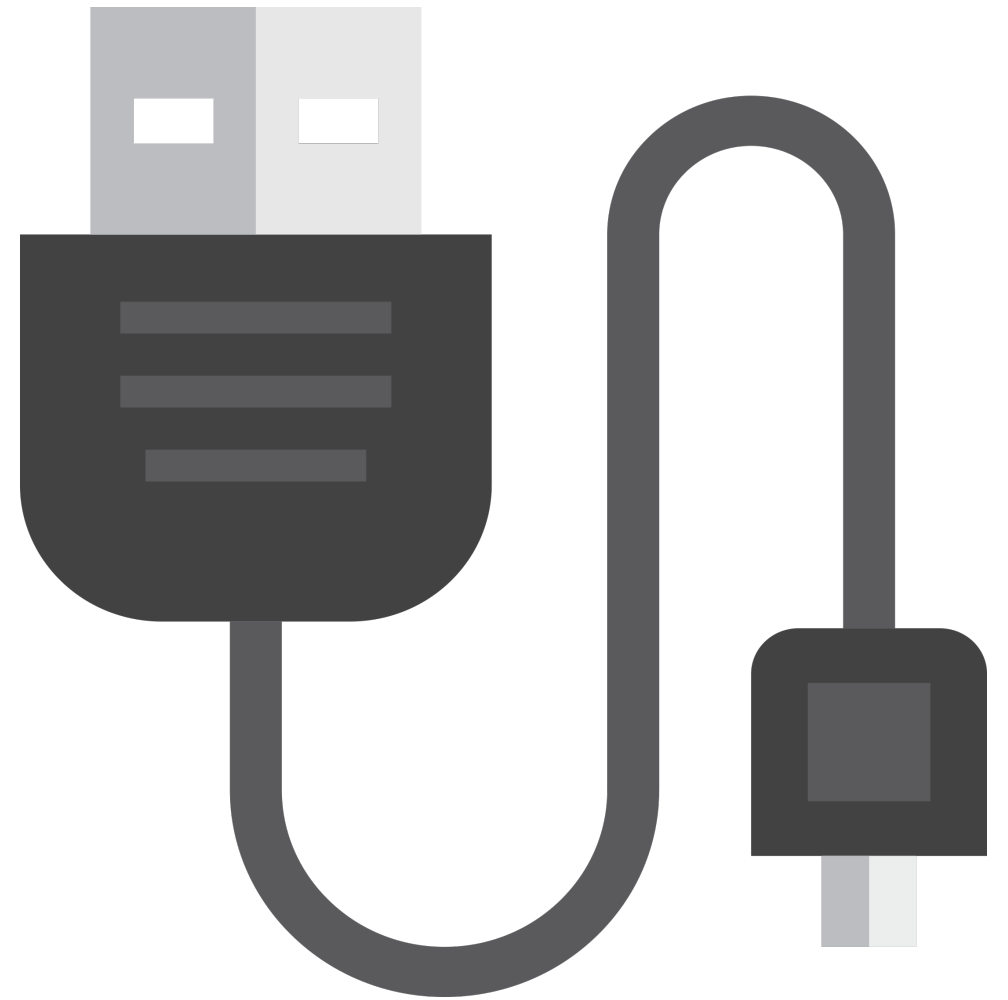
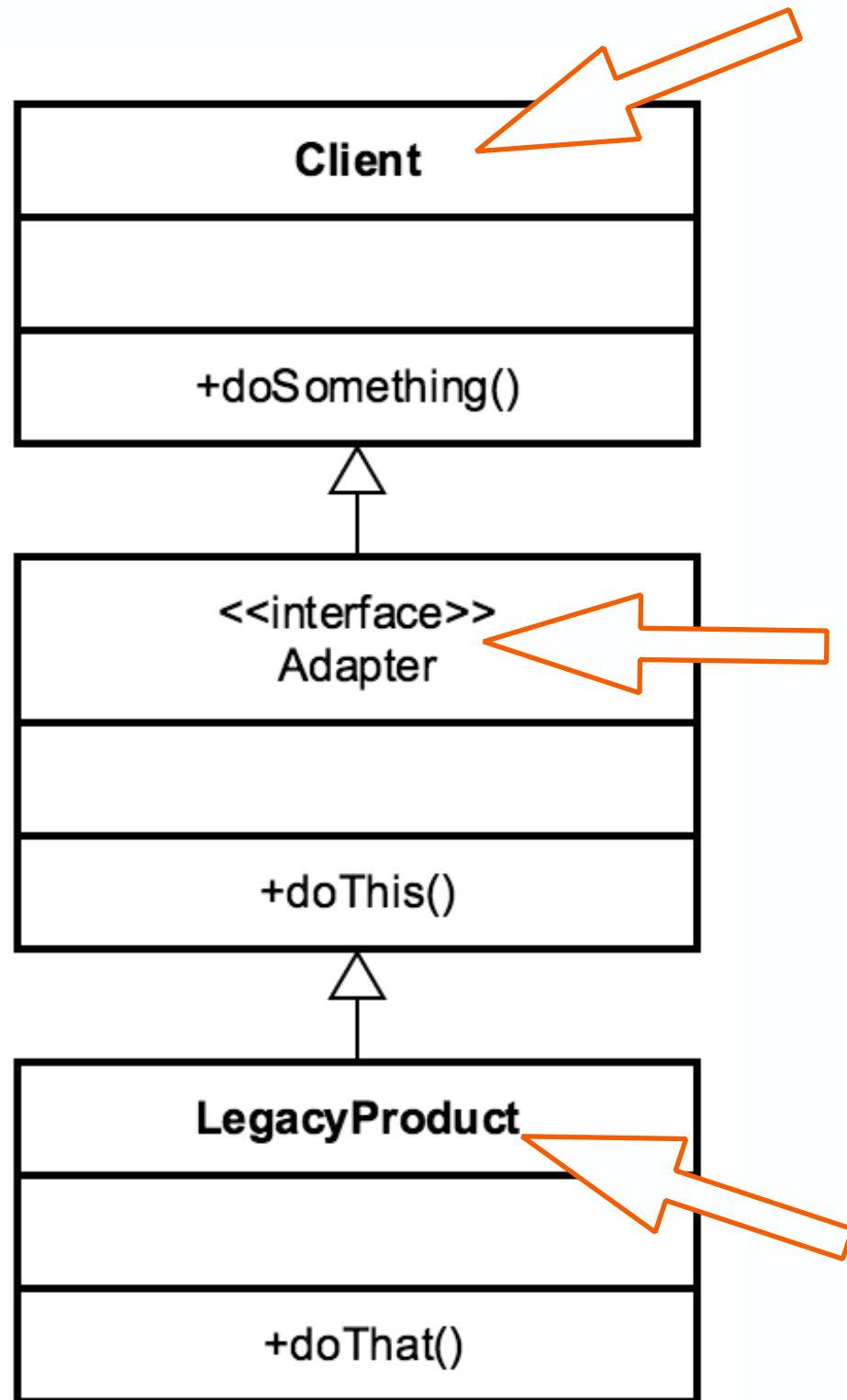twitter: bh5k | http://www.linkedin.com/in/hansenbryan

Adapter

Concepts

- Plug adaptor

- Convert interface into another interface

- Legacy

- Translates requests

- Client, Adapter, Adaptee

- Examples:
  - Arrays -> Lists
  - Streams

Design

Client centric

Integrate new with old

Interface, but not required
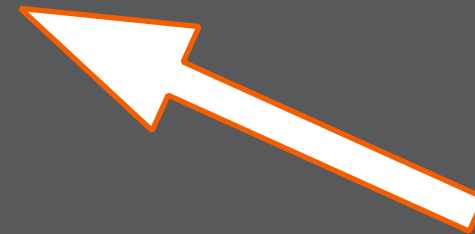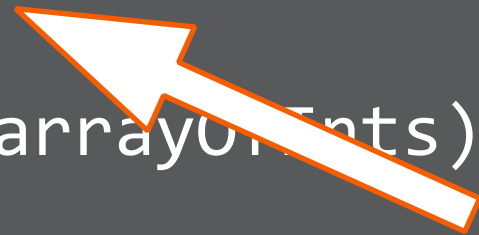
Adaptee can be the implementation

Everyday Example - Arrays.asList

```java
Integer[] arrayOfInts = new Integer[] { 42, 43, 44 };

List<Integer> listOfInts = Arrays.asList(arrayOfInts);

System.out.println(arrayOfInts);

System.out.println(listOfInts);
```
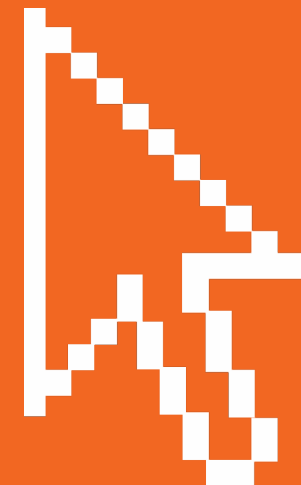
Exercise Adapter

Walkthrough

Create Adapter

Decorator

Another Adapter

Pitfalls

- Not a lot!
- Don't complicate
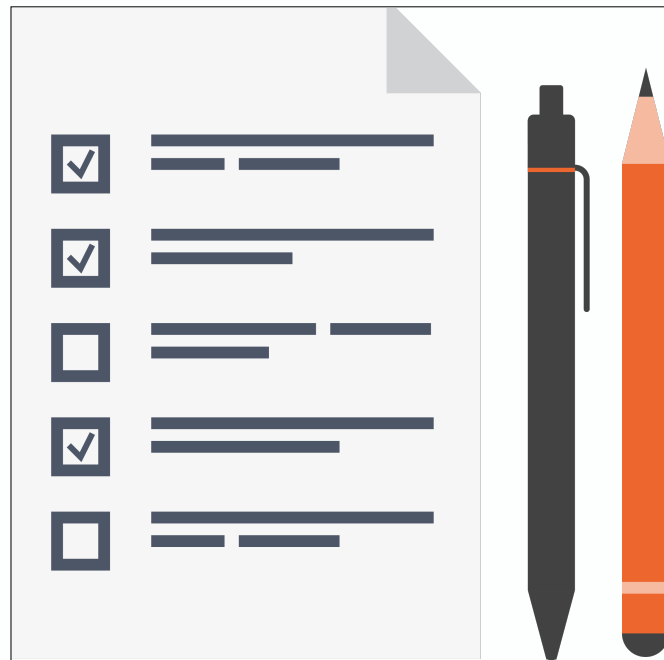- Multiple Adapters
- Don't add functionality

Contrast

Adapter

- Works after code is designed
- Legacy
- Retrofitted
- Provides different interface

Bridge

- Designed upfront
- Abstraction and implementation vary
- Built in advance
- Both adapt multiple systems

Adapter Summary

- Simple solution

- Easy to implement

- Integrate with Legacy

- Can provide multiple adapters