**Two parts of ADT**: encapsulated data and methods;

: cannot be instantiated, but may declare abstract methods. Use abstract class as a parent class usually, the complete method definition and method body doesn’t appear in abstract class definition. Abstract methods are imposed requirements that all subclasses implement those methods.

Can’t create objects in abstract class, but you can reference an object that belongs to a subclass of type Food.

Interface: specifies requirements, can’t have data fields and methods that aren’t abstract

1.Main **difference** is methods of a Java **interface** are implicitly **abstract** and cannot have implementations. A Java **abstract class** can have instance methods that implements a default behavior. 2.Variables declared in a Java **interface** is by default final. An **abstract class** may contain non-final variables.

Know interface, ADT…

Testing slide: black box (closed box) White box? There might be 4…

Testing levels: slide

1. Unit testing: smallest testable piece of software (method/class)
2. Integration testing: testing interaction among units, mostly method
3. System testing: testing of the whole program in context in which it will be used
4. Acceptance testing: system testing designed to show that program meets functional requirements.

Black box – functioning, closed box testing

White box – specifics, tests software element, ensures each statement is covered at least once.

Polymorphism – more than one, parent class sub class,

Overloading, overriding

When would u use linked list, advantages, what is it, scenarios:

Reallocate, expands automatically, when to expand?

PITFALLS:

list: add and remove, shifts,

when to use array vs arraylist

stubs – the replacement for a method that has not yet been implemented or tested is called this. Same header as method replaced, but body only displays message indicating stub was called.

Mainly explanations