PIC 10B Discussion
Week 6
Professor: Michael Lindstrom
TA: Thomas Tu
Operator Overloading

• Define a class AddableVector that inherits from std::vector
• AV operator+=(const AV& a)
• Define the operator +=, which adds one AddableVector to another
  • This process appends the elements of the right hand side AddableVector to
    the left hand side AddableVector
• Use the *this operator to call push_back
Operator Overloading

• friend AV operator+(const AV& a, const AV& b)
• Define the operator +, which adds two AddableVectors and returns the result
  • This process creates a new AddableVector with the elements of the first, followed by the elements of the second
• Hint: This is really easy once you’ve done +=
• Hint 2: Copy constructor gets inherited for you
Operator Overloading

• Define a parent class Fruit which has a member variable size
• Define child classes Apple and Orange
• Define the operators >, <, ==, <=, >=, and !=, with respect to size
  • i.e. a>b if a.size() > b.size()
  • Use copy paste once you get one to get the others...
Operator Overloading

• Move semantics and copy constructors
• T& operator=(const T& original)
• T& operator=(T&& original)
• Basket class: contains a Fruit
  • Move swaps the fruit, copy copies it