



PizzaNet

Pizza Ordering Application

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The Project Concept



CUSTOMER SELECTS WHAT
PIZZA THEY WOULD LIKE TO
ORDER



CUSTOMER MAY ADD OR
REMOVE TOPPINGS, OR
CHANGE SIZE



CUSTOMER CAN THEN ADD
MORE PIZZAS OR CHECK
OUT



CUSTOMER IS PROMPTED
FOR PERSONAL AND
DELIVERY INFORMATION

Scope

Does

- ◆ Allow customer to create order
- ◆ Store order information
- ◆ Calculate price

Does Not

- ◆ Implement a map API
- ◆ Connect to a network
- ◆ Actually make a pizza :(

The Application

- ◈ Written in Java using Eclipse
- ◈ MVC Design Pattern
- ◈ Command Line UI
 - ◈ UI uses imported text files for menus

```
Name: Kaleb Olson
Email: kaleb.olson@stthomas.edu
Phone: 6125554559
Address: 5656 Eclipse Way, St Paul MN
Order Details:
medium Sausage Pizza (sausage, )
    $13.0
large Hawaiian Pizza (canadian bacon, pineapple, )
    $15.0

Total: $28.0

Does everything look correct? y/n
y
Great! See you within 30 minutes.
You may place another order, or select 5 to quit.
```

What would you like to add?

Which topping?

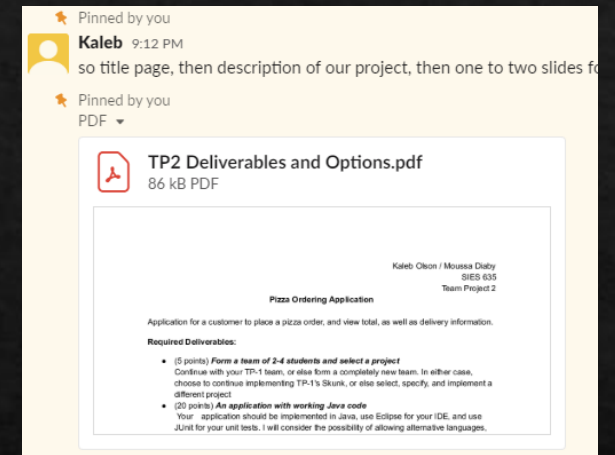
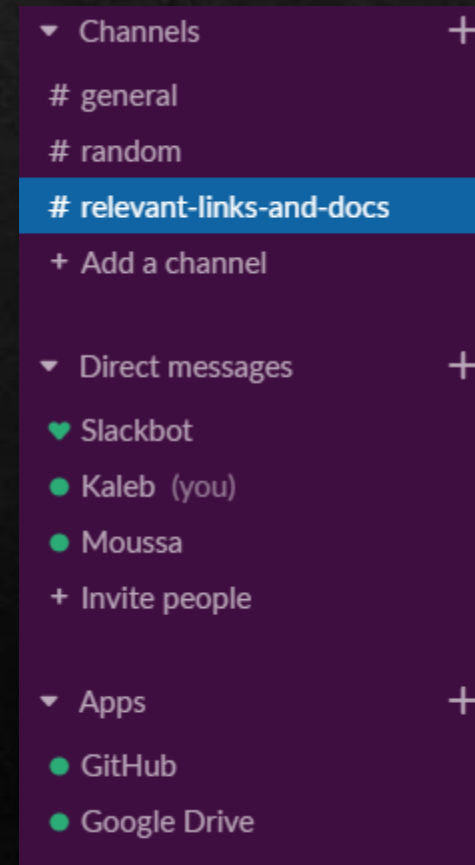
1. Bacon
2. Black Olives
3. Canadian Bacon
4. Green Peppers
5. Jalepeno
6. Mushrooms
7. Onions
8. Pepperoni
9. Pineapple
10. Sausage

- For this project, Moussa hosted the repository, and Kaleb forked a copy
- Github was a great way to keep track of where our project was at
- Working simultaneously on different tasks is a huge plus
- We did run into several merge conflicts along the way
- When working with a forked repo, not only do you need to pull every time you start working, but you need to ensure your fork is up to date with the primary repo.



Option 1: Slack for Team Communication

- ◇ Biggest advantages of Slack
 - ◇ Can be used on a cell phone
 - ◇ Multiple channels for multiple purposes
 - ◇ 3rd Party application integrations



Option 2: JSparrow for Refactoring



Some great
refactoring tips



Automatic
implementation

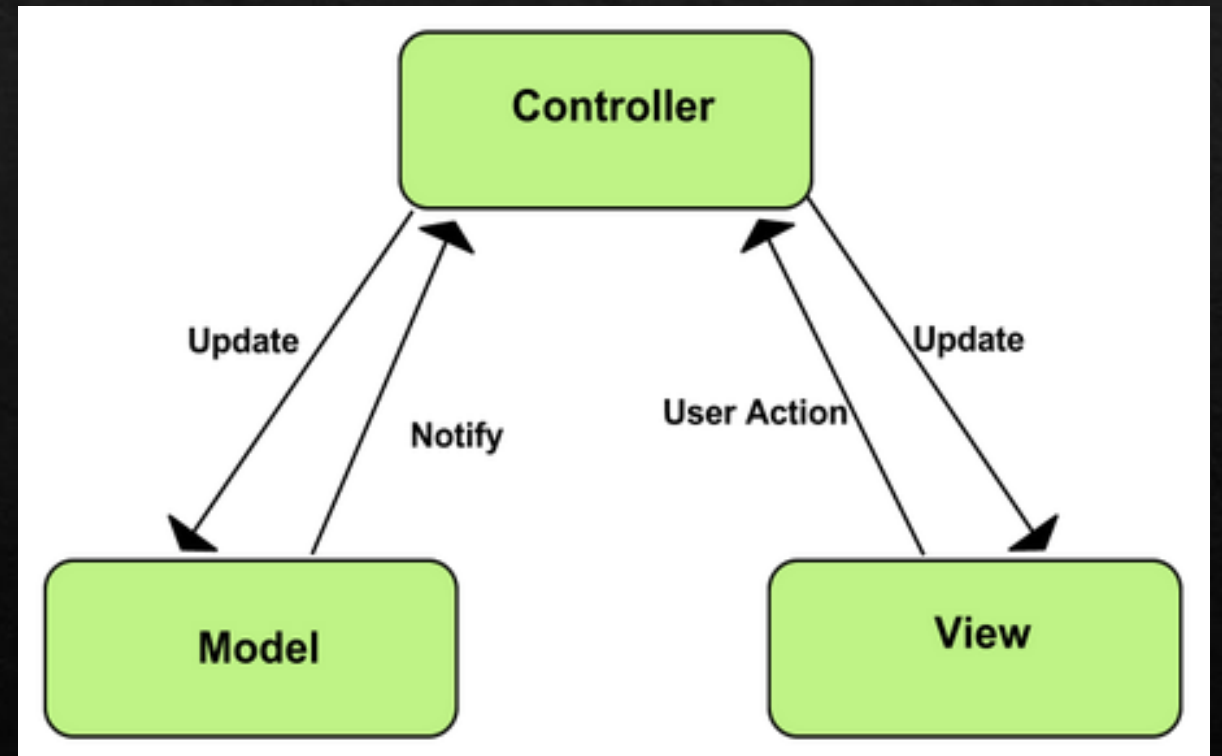


Free version is
very limiting

Java Source Compare (Pizza.java)	
Original Source	Refactored Source
34 return size; 35 } 36 37 //this method adjusts the price of the pizza according to size 38 public void setPizzaSize(String size) { 39 this.size = size; 40 41 if (size.equals("small")) 42 this.price=10; 43 else if (size.equals("medium")) 44 this.price=13; 45 else if (size.equals("large")) 46 this.price=15; 47 } 48 49 public void addTopping(Topping topping) { 50 toppings.add(topping); 51 this.price+=topping.getPrice(); 52 } 53 54 public void removeTopping(String topping) { 55 for (Topping t : toppings) { 56 if (t.getName().equals("topping")) 57 {	34 return size; 35 } 36 37 //this method adjusts the price of the pizza 38 public void setPizzaSize(String size) { 39 this.size = size; 40 41 if ("small".equals(size)) 42 this.price=10; 43 else if ("medium".equals(size)) 44 this.price=13; 45 else if ("large".equals(size)) 46 this.price=15; 47 } 48 49 public void addTopping(Topping topping) { 50 toppings.add(topping); 51 this.price+=topping.getPrice(); 52 } 53 54 public void removeTopping(String topping) { 55 for (Topping t : toppings) { 56 if ("topping".equals(t.getName())) 57 {

Option 3: Superior Separation of Domain and UI layers

- ◇ Application follows Model-View-Controller pattern
 - ◇ M: Domain was written initially
 - ◇ C: Controller class written next to execute domain layer functions
 - ◇ V: UI instantiates and implements controller class (referred to as "app")



Option 4: Use Case

Use Case: Ordering pizza

Scope: Pizza Ordering Application

Level: user goal

Primary Actor: Customer

Stakeholders and interests:

Customer: Wants to be able to easily order pizza and customize it to his desires.

Our team: want to make sure that the customer has no issue ordering pizza

Preconditions: customer knows the type of service we provide

Postconditions: customer delightfully ordered the pizza of his choice.

Basic Flow

1. Customer opens the pizza ordering application
2. Customer analyzes his options
3. Customer decides what type of pizza he wants. (customized or not)
4. customer places and order
5. A receipt is given after the order is made

Extensions (or alternative Flows):

*a. At any time, System fails:

To ensure everything is processed correctly

1. Customer completely closes the app and reopens it
2. The system automatically saves previous entry
3. Customer picks up where he left and finalizes his order
4. A receipt is given after the order is made

Special Requirements

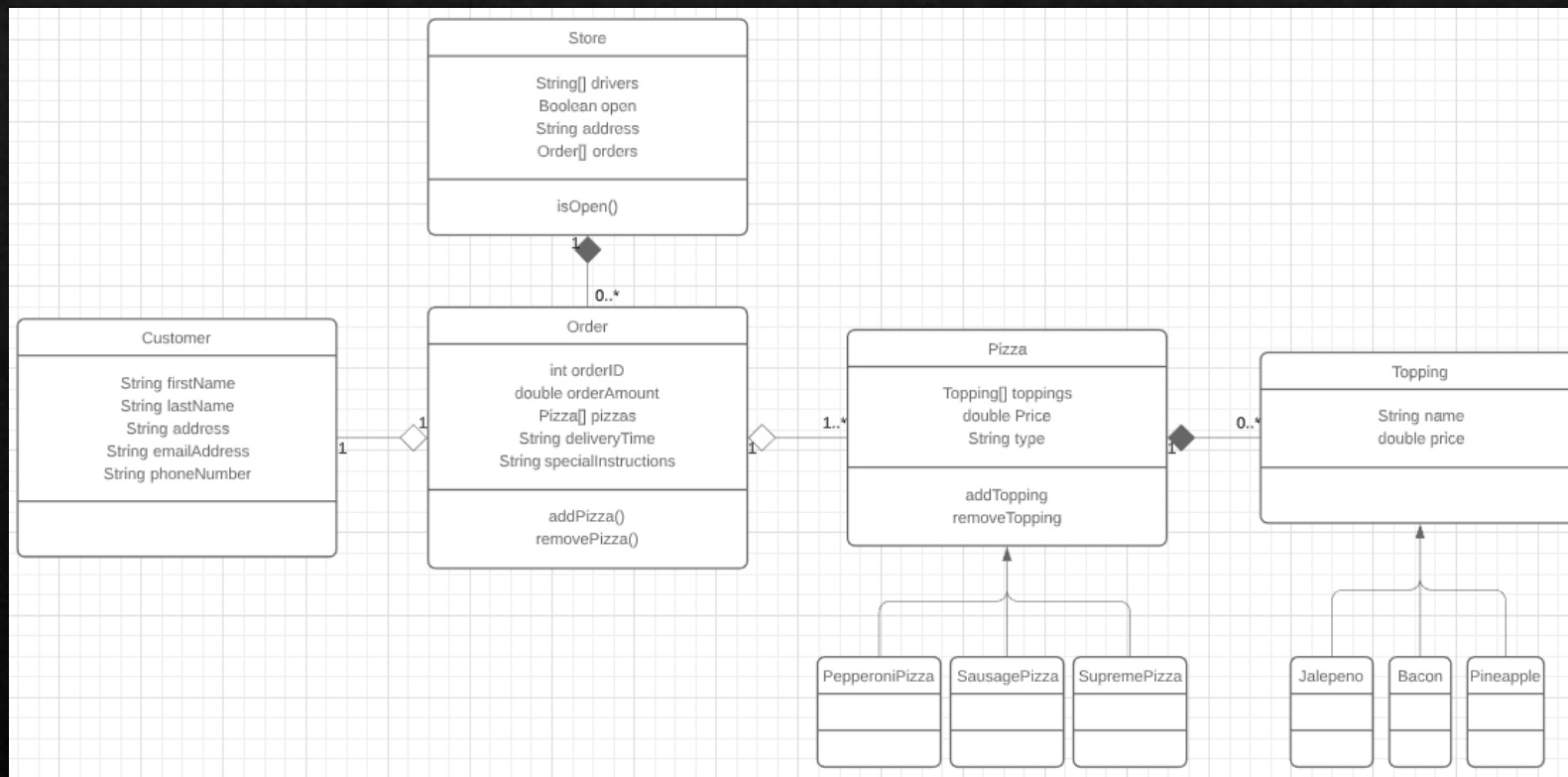
Any smart device (phone, laptop, etc.)

Frequency of occurrence: Could be nearly continuous

Open issues:

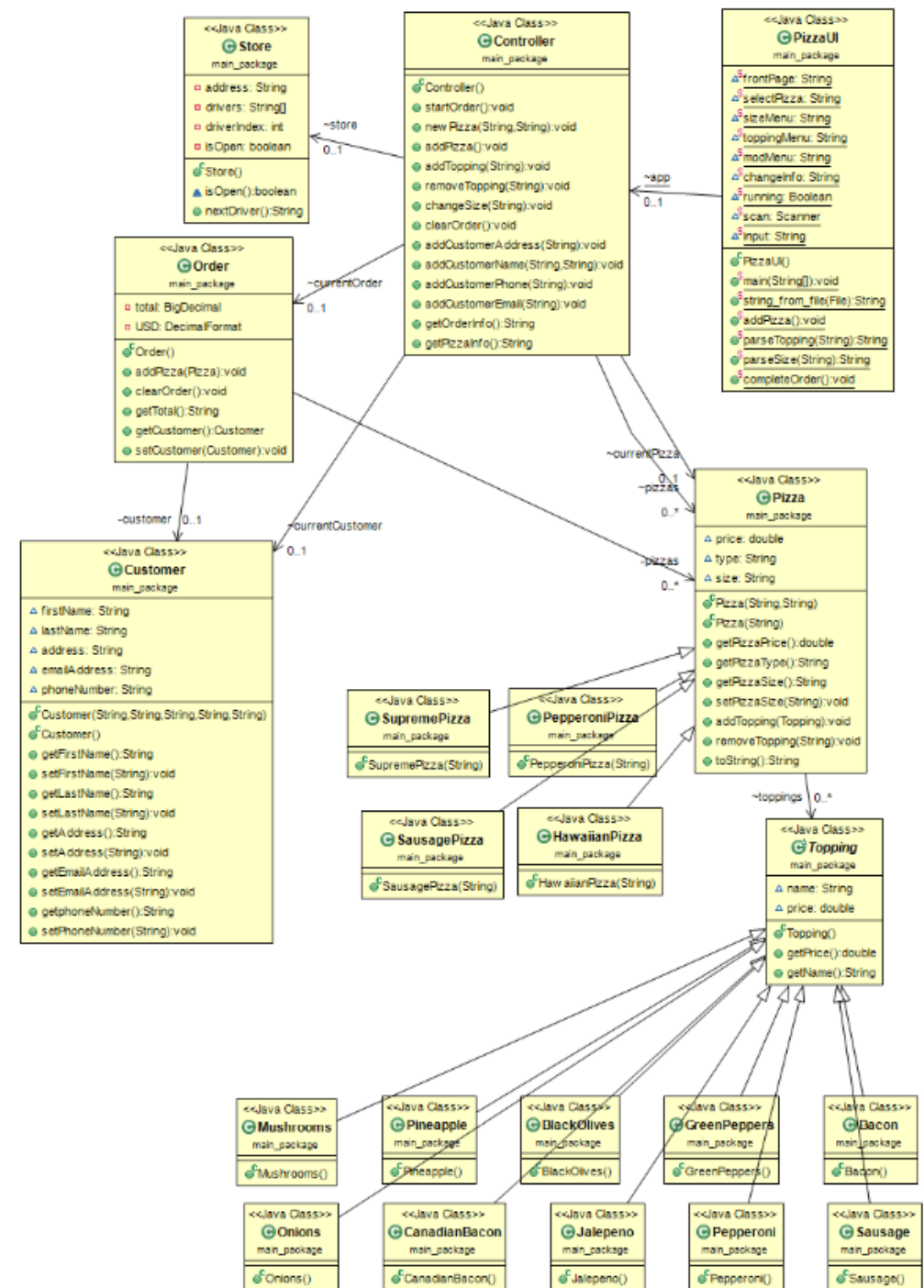
- What if the customer does not find a pizza of his choice
- What if issues are beyond customer's control?
- What if the customer wants to pay with cash ?

Option 5: Domain Class Diagram



Reverse Engineered DoCD

◆ Here's how it actually turned out!



Code Demonstration!