

**Working With Data** | *enum* revisited

# Enums

- ◆ *enum* is a type that can represent one item at a time
  - Each item is called a variant
- ◆ *enum* is not limited to just plain variants
  - Each variant can optionally contain additional data

# Example

```
enum Mouse {  
    LeftClick,  
    RightClick,  
    MiddleClick,  
    Scroll(i32),  
    Move(i32, i32),  
}
```

# Example

```
enum PromoDiscount {  
    NewUser,  
    Holiday(String),  
}
```

```
enum Discount {  
    Percent(f64),  
    Flat(i32)  
    Promo(PromoDiscount),  
    Custom(String),  
}
```

# ■ Recap

- ◆ *enum* variants can optionally contain data
  - The data can be another *enum*
- ◆ Can mix plain identifiers and data-containing variants within the same *enum*
- ◆ More than one piece of data can be associated with a variant