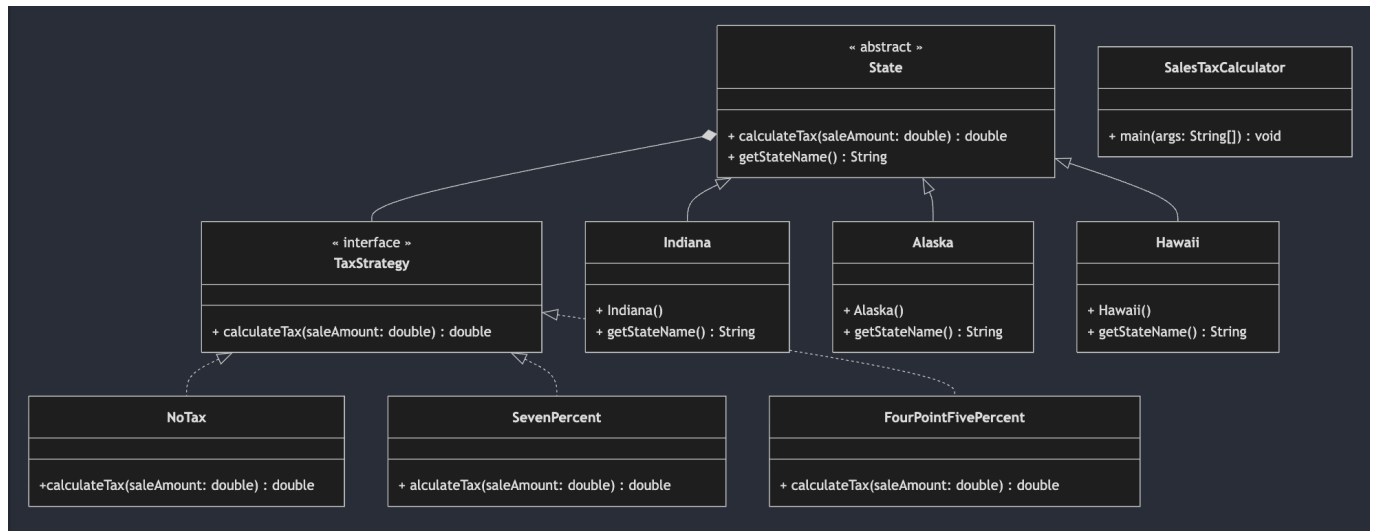


Brett Dutka
bcdutka
C322 - Assignment 1

Problem 1 (UML Class Diagram):



Problem 2:

- 1.) MallardDuck represents an IS-A relationship since MallardDuck inherits from Duck which means that MallardDuck is a type of duck.
- 2.) RedheadDuck represents an IS-A relationship since RedheadDuck inherits from Duck, which means that it is a type of duck
- 3.) RubberDuck represents an IS-A relationship because RubberDuck inherits from Duck, which means that it is a type of duck
- 4.) DecoyDuck represents an IS-A relationship because DecoyDuck inherits from Duck so it is a type of duck
- 5.) FlyBehavior represents a HAS-A relationship because Duck has a flyBehavior field which means Duck has a flying behavior implementation.
- 6.) QuackBehavior represents HAS-A relationship because Duck has a quackBehavior field which means it has an implementation
- 7.) Quack represents an IS-A relationship because Quack implements QuackBehavior meaning Quack is a type of QuackBehavior
- 8.) Squeak represents an IS-A relationship because Squeak implements QuackBehavior which means that Squeak is a type of QuackBehavior
- 9.) MuteQuack represents an IS-A relationship because MuteQuack implements QuackBehavior which means MuteQuack is a type of QuackBehavior

Problem 3:

