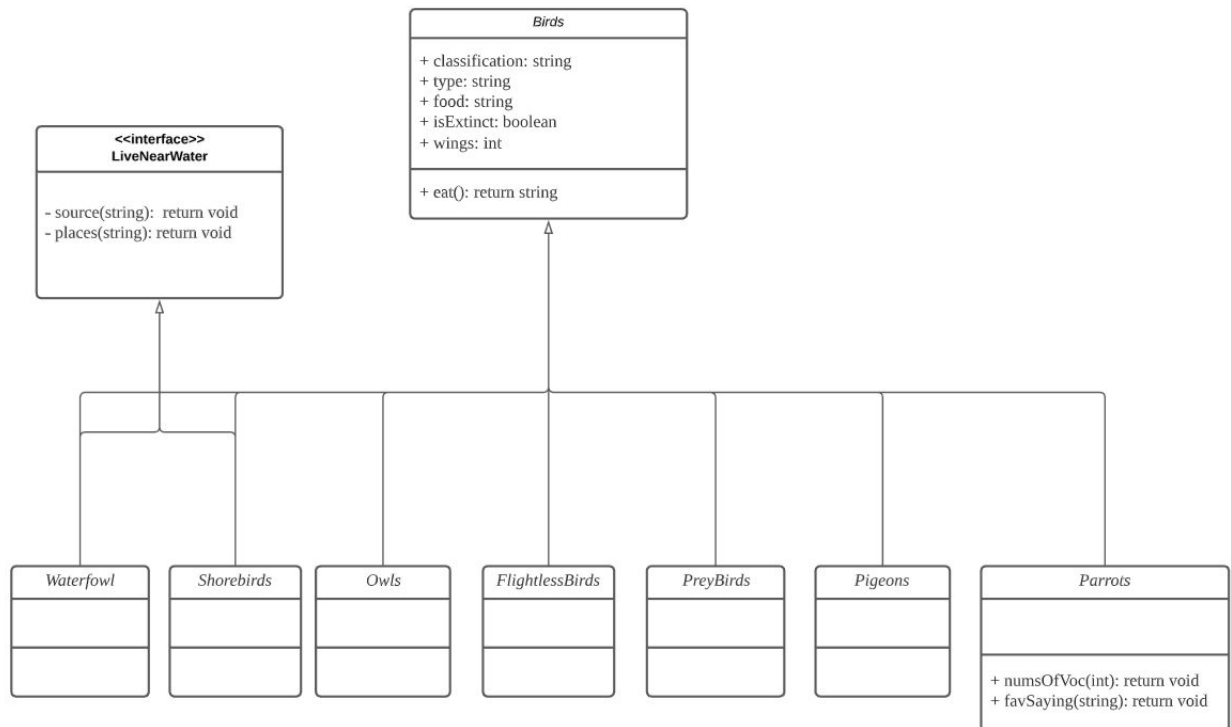


# Birds UML

Chien-Yu Chen

## . UML class



## . Test case

1. If `WhatBirds.characteristics == "have sharp, hooked beaks with visible nostrils."`, then its `preyBird` abstract class, could be hawks, eagles and osprey.
2. If `WhatBirds.wings == 0`, then it is `FlightlessBirds` abstract class, could be emus, kiwis and moas.
3. If `WhatBirds.characteristics == "have a short, curved beak and are known for their intelligence and ability to mimic sounds."`, then it is `Parrots` abstract class. `Parrots.numOfVoc()` would return numbers of vocabulary of different types of parrots, could be rose-ring parakeet, gray parrot, and sulfur-crested cockatoo.
4. If `WhatBirds.liveNearWater == True`, then it could be `ShoreBirds` or `Waterfowl` abstract class. We classified them by places they live.