

## Airplane exercise

### 2: Landing

- Unique id for each airplane object
- Create constructor, initialize fields
- Landing functionality
  - In order to land the plane successfully, the plane must be in Landing mode
  - If the plane is in Landing mode, then decreasing the altitude will land the plane
  - If the plane is not in Landing mode, then decreasing the altitude will explode the plane
  - Therefore, you need to add:
    - A new possible state (Landing mode)
    - A new possible action (Enter landing mode)
  - Draw a State/Action diagram to design your model's logic before starting to code
  - Be sure to follow the same pattern as before for your action methods:
    - If the action is valid
      - Apply the action by updating the airplane's state
      - Display a message describing the action / state-change
    - Else if the action is invalid
      - Display a user-friendly error message to the user
    - Return a Boolean error code indicating whether the action was valid/successful