```
Building
# ParticleSystem m smokeEffect
# sf::Texture m_smokeTexture
# sf::Vector2f m position
# std::string m name
# sf::Texture m_buildingTexture
# sf::Sprite m buildingSprite
# sf::CircleShape m placementRadius
# sf::RectangleShape m healthBar
# sf::RectangleShape m healthBarBackground
# int m health
# int m maxHealth
# int m cost
# BuildingType m_type
# bool m placementRadiusVisible
+ Building(BuildingType m_type)
+ virtual ~Building()
+ virtual void update(sf::Time t deltaTime)
+ virtual void render(sf::RenderWindow &m window)
+ void takeDamage(float m damageAmount)
+ void setPosition(const sf::Vector2f &m_position)
+ sf::Vector2f getPosition()
+ int getCost() const
+ float getHealth() const
+ BuildingType getType() const
+ bool checkAffordability()
+ void setPlacementRadiusSize(float m radius)
+ void setHealth(float newHealth)
+ const sf::Sprite & getBuildingSprite() const
+ const sf::Texture & getBuildingTexture() const
+ const sf::CircleShape & getPlacementRadius() const
+ void updateHealthBar()
# void initSmokeEffect()
# void spawnSmokeEffect()
                       AirCraft
```

- + AirCraft()
- + ~AirCraft()
- + void update(sf::Time t\_deltaTime) override
- + void render(sf::RenderWindow &m\_window) override