User story 1

As an air traffic controller So I can get passengers to a destination I want to instruct the airport to land a plane

Objects	Properties	Messages	Output
airport	landedPlanes@array[@plane]	addPlane(@inputPlane	@strin g
inputPlane	Plane@string	getPlane()	@strin g

User story 2

As the system designer
So that the software can be used for many different airports
I would like a default airport capacity that can be overridden as appropriate

Objects	Properties	Messages	Output
airport	newCapacity@number planeList@array.length defaultCapacity@array airportCapacity@array[@plane]	defaultCapacity() increaseCapacity()	@number

User story 3

As an air traffic controller
To ensure safety
I want to prevent landing when the airport is full

Objects	Properties	Messages	Output
airport	planeList@array[@plane] planeList@array.length capacity@number	airportIsFull()	@boolean
plane	plane@string	getPlane()	@string

User story 4

As an air traffic controller

So I can get passengers on the way to their destination

I want to instruct the airport to let a plane take off and confirm that it is no longer in the airport

Objects	Properties	Messages	Output
airport	planeList@array[@plane] capacity@number planeList@array.length	removePlane@plane confirmPlane@plane	@string @boolean
plane	plane@string	getPlane@plane	@string

User story 5

As an air traffic controller

To avoid confusion

I want to prevent asking the airport to let planes take-off which are not at the airport, or land a plane that's already landed

Objects	Properties	Messages	Output
airport	planeList@array[@plane]	addPlane@plane removePlane@plane confirmPlane@plane	@boolean @string
plane	plane@string	getPlane@plane	@string