状态更新可以定义三个状态：Ready/NotReady/Error，代码中可以定义一个默

认班级的容量：

比如 10 人，如果 ClassSize 小于 10，状态为 NotReady，

ClassSize 等于 10，状态为 Ready，

ClassSize 大于 10 状态为 Error。

这里可以使用 assert 返回结果

```yaml
apiVersion: school.crd.io/v1
kind: Class
metadata:
  name: student
spec:
  # Add fields here
  className: "计算机应用二班"
  teacherName: "杰克"
  replicas: 8
  image: gdsz.harbor.com/library/myhttp:v1
```

```
bogon:school-operator JackMeng$
bogon:school-operator JackMeng$ kubectl apply -f deploy/crds/school.crd.io_v1_class_cr.yaml
class.school.crd.io/student configured
bogon:school-operator JackMeng$
```

小于 10 的状态为:NotReady

```
bogon:~ JackMeng$
bogon:~ JackMeng$ kubectl describe class
Name:         student
Namespace:    default
Labels:       <none>
Annotations:  kubectl.kubernetes.io/last-applied-configuration:
                {"apiVersion":"school.crd.io/v1","kind":"Class","metadata":{"annotations":{},"name":"student","namespace":"default"},"spec":{"className":"...
              spec: {"className":"计算机应用二班","teacherName":"杰克","replicas":8,"image":"gdsz.harbor.com/library/myhttp:v1"}
API Version:  school.crd.io/v1
Kind:         Class
Metadata:
  Creation Timestamp:  2021-01-12T00:39:42Z
  Generation:          16
  Resource Version:    12274850
  Self Link:           /apis/school.crd.io/v1/namespaces/default/classes/student
  UID:                 8ec73c75-2829-4566-9412-fa2ef96a318b
Spec:
  Class Name:   计算机应用二班
  Image:        gdsz.harbor.com/library/myhttp:v1
  Replicas:     8
  Teacher Name: 杰克
Status:
  Pod Names:
    student-6b7597f46b-gbzjk
    student-6b7597f46b-gsb6k
    student-6b7597f46b-k7hwr
    student-6b7597f46b-mvlpz
    student-6b7597f46b-nr7v7
    student-6b7597f46b-p2hp6
    student-6b7597f46b-w6j2n
    student-6b7597f46b-zwt7p
  Replicas:  8
  Status:    NotReady
Events:      <none>
bogon:~ JackMeng$
```

等于 10 的状态为:Ready

bogon:~ JackMeng$ kubectl describe class
Name: student
Namespace: default
Labels: <none>
Annotations: kubectl.kubernetes.io/last-applied-configuration:
                 {"apiVersion":"school.crd.io/v1","kind":"Class","metadata":{"annotations":{},"name":"student","namespace":"default"},"spec":{"className":"...
               spec: {"className":"计算机应用二班","teacherName":"杰克","replicas":10,"image":"gdsz.harbor.com/library/myhttp:v1"}
API Version: school.crd.io/v1
Kind: Class
Metadata:
  Creation Timestamp: 2021-01-12T00:39:42Z
  Generation: 17
  Resource Version: 12275451
  Self Link: /apis/school.crd.io/v1/namespaces/default/classes/student
  UID: 8ec73c75-2829-4566-9412-fa2ef96a318b
Spec:
  Class Name: 计算机应用二班
  Image: gdsz.harbor.com/library/myhttp:v1
  Replicas: 10
  Teacher Name: 杰克
Status:
  Pod Names:
    student-6b7597f46b-gbzjk
    student-6b7597f46b-gsb6k
    student-6b7597f46b-k7hwr
    student-6b7597f46b-mvlpz
    student-6b7597f46b-nr7v7
    student-6b7597f46b-p2hp6
    student-6b7597f46b-p66pq
    student-6b7597f46b-r2bv9
    student-6b7597f46b-w6j2n
    student-6b7597f46b-zwt7p
  Replicas: 10
  Status: Ready
Events: <none>
bogon:~ JackMeng$

大于 10 的状态为:Err

Labels: <none>
Annotations: kubectl.kubernetes.io/last-applied-configuration:
                 {"apiVersion":"school.crd.io/v1","kind":"Class","metadata":{"annotations":{},"name":"student","namespace":"default"},"spec":{"className":"...
               spec: {"className":"计算机应用二班","teacherName":"杰克","replicas":20,"image":"gdsz.harbor.com/library/myhttp:v1"}
API Version: school.crd.io/v1
Kind: Class
Metadata:
  Creation Timestamp: 2021-01-12T00:39:42Z
  Generation: 18
  Resource Version: 12275609
  Self Link: /apis/school.crd.io/v1/namespaces/default/classes/student
  UID: 8ec73c75-2829-4566-9412-fa2ef96a318b
Spec:
  Class Name: 计算机应用二班
  Image: gdsz.harbor.com/library/myhttp:v1
  Replicas: 20
  Teacher Name: 杰克
Status:
  Pod Names:
    student-6b7597f46b-6ffxr
    student-6b7597f46b-7c66v
    student-6b7597f46b-7grtn
    student-6b7597f46b-cwrzt
    student-6b7597f46b-gbzjk
    student-6b7597f46b-gsb6k
    student-6b7597f46b-hx229
    student-6b7597f46b-j8sff
    student-6b7597f46b-jvrzs
    student-6b7597f46b-k7hwr
    student-6b7597f46b-mvlpz
    student-6b7597f46b-nr7v7
    student-6b7597f46b-p2cv4
    student-6b7597f46b-p2hp6
    student-6b7597f46b-p66pq
    student-6b7597f46b-r2bv9
    student-6b7597f46b-tg8wr
    student-6b7597f46b-vrhhd
    student-6b7597f46b-w6j2n
    student-6b7597f46b-zwt7p
  Replicas: 20
  Status: Error
Events: <none>

```
bogon:operator JackMeng$
bogon:operator JackMeng$
bogon:operator JackMeng$ go test -v -run TestReadyAndNotReadyAndErrStatus .
=== RUN   TestReadyAndNotReadyAndErrStatus
【ClassSize小于10，状态为NotReady】replicas:5,status:NotReady


----------------------------------------------------------------------------------
【ClassSize等于10，状态为Ready】replicas:10,status:Ready


----------------------------------------------------------------------------------
【ClassSize大于10状态为Error】replicas:15,status:Error


----------------------------------------------------------------------------------
--- PASS: TestReadyAndNotReadyAndErrStatus (80.92s)
PASS
ok      github.com/school/school-operator/operator      81.432s
bogon:operator JackMeng$
```