# ToDo app

This is a very simple todo application and we it do the job.

# Build the todo-app

./mvnw clean package

## **Deployment to OpenShift**

### Push app to registry on OpenShift

Port forward - make OpenShift registry accessible on port 5000

```
oc port-forward pod/$(oc get pods -n openshift-image-registry | awk '/^image-registry/{print $1}') -n openshift-image-registry 5000
```

Login to registry on OpenShift

```
podman login --tls-verify=false -u unused -p $(oc whoami -t) localhost:5000/openshift
```

Build images

```
podman build -f src/main/docker/Dockerfile.jvm -t localhost:5000/openshift/todo-app:v1
.
```

Push images to registry on OpenShift

```
podman push --tls-verify=false localhost:5000/openshift/todo-app:v1
```

### **Deploy todo-app**

Create a new namespace named todo

```
oc create namespace todo
```

Apply configmap todo-app-configmap to namespace todo

```
oc apply -f todo-app-configmap.yaml -n todo
```

Apply deployment todo-app-deployment to namespace todo

```
oc apply -f todo-app-deployment.yaml -n todo
```

*Apply service* todo-app to todo namespace

```
oc apply -f todo-app-service.yaml -n todo
```

#### Use Todo app

- Start page
- health
- metrics
- swagger-ui

## **Testing**

Read list of ToDos via Curl

```
curl -I \
   -H "accept: application/json" \
   "http://console-openshift-console.apps-crc.testing:32284/todos?from=0&limit=2"
```

test-scripts/curl\_list\_todos.sh

Create a ToDo via Curl

```
curl -H "accept: application/json" \
   -H "Content-Type: application/json" \
   -d "{\"body\":\"Curl test - body\",\"subject\":\""$(date +"%Y-%m-%dT%H:%M:%S%z")"
- Curl test - subject\"}" \
   -X POST "http://console-openshift-console.apps-crc.testing:32284/todos"
```

test-scripts/curl\_create\_one\_todo.sh

```
#!/bin/bash

for i in {1..100}

do
    curl -H "accept: application/json" \
        -H "Content-Type: application/json" \
        -d "{\"body\":\"Curl test - body\",\"subject\":\""$(date +"%Y-%m-%dT%H:%M:%S%z")" - Curl test - subject\"}" \
        -X POST "http://console-openshift-console.apps-crc.testing:32284/todos"
done
```

test-scripts/curl\_create\_100\_todo.sh

Create ToDos via Apache HTTP server benchmarking tool

```
#!/bin/bash

if [ -f "createToDo.json" ]; then
    rm -f createToDo.json

fi

cat <<-EOF > "createToDo.json"
{
    "body": "body - ab testing",
    "subject": "subject - ab testing"
}
EOF

ab -n 100 -c 10 -T "application/json" -p createToDo.json -m POST \
    http://console-openshift-console.apps-crc.testing:32284/todos
```

test-scripts/ab\_create\_todos.sh

Read list of ToDos via Apache HTTP server benchmarking tool

```
#!/bin/bash
ab -n 1000 -c 10 -T "application/json" \
   http://console-openshift-console.apps-crc.testing:32284/todos
```

test-scripts/ab\_list\_todos.sh

#### Links

Apache HTTP server benchmarking tool