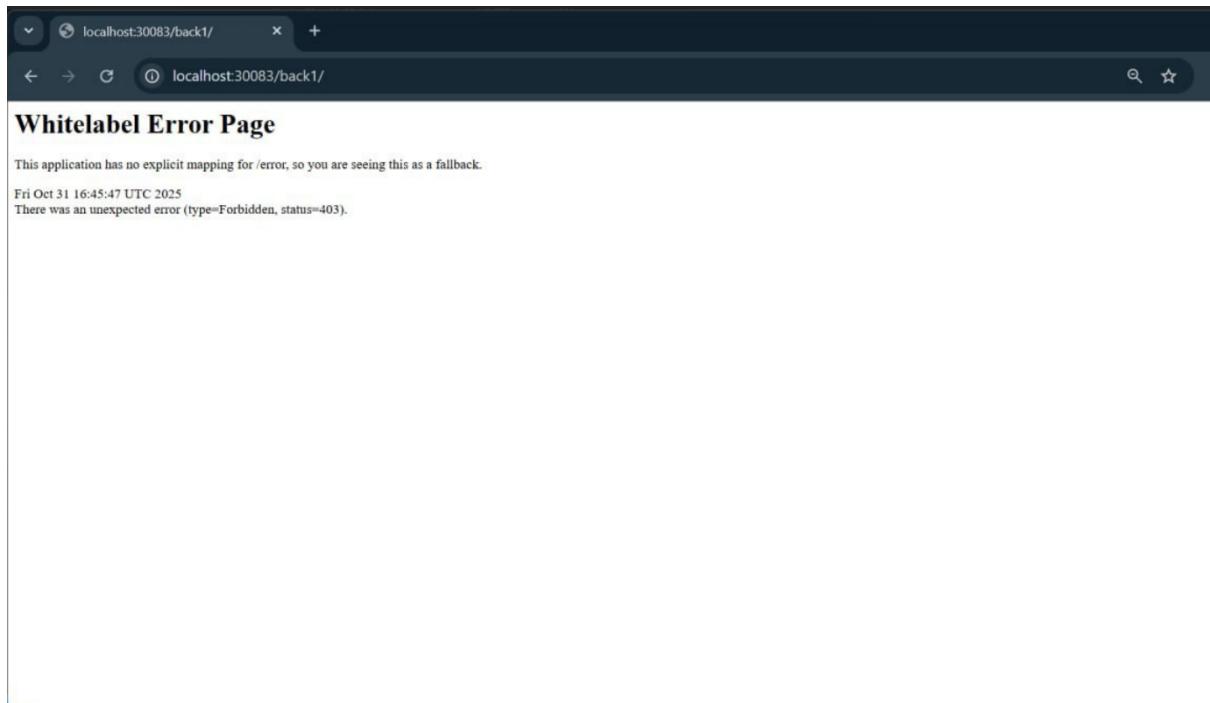


Practical 8&9: Deploy a Fullstack Application Using Helm and Ingress with Autoscaling

Docker Desktop interface showing the Images section. The sidebar includes options like Ask Gordon, Containers, Images (selected), Volumes, Kubernetes, and Builds. The main area shows a table of 26 images with columns for Name, Tag, Image ID, Created, Size, and Actions. The table includes rows for kube-apiserver, kube-proxy, kube-scheduler, kube-controller-manager, busybox, etcd, coredns, pause, vpknit-controller, and storage-provisioner. A message at the bottom indicates "Kubernetes starting RAM 5.09 GB CPU 77.24% Disk: 18.29 GB used (limit 1006.85 GB)".

Browser screenshot showing the E-Commerce KLU application at localhost:30083/ecommerce/about-us. The page features a navigation menu on the left with links for About Us, Computers, Mobiles, Laptops, and Pendrives. The main content area has a title "About Our Electronic Store" and a welcome message: "Welcome to our E-Commerce platform, your one-stop shop for the latest and greatest in electronics! We specialize in high-quality products, including computers, mobiles, laptops, and accessories." Below this are four product categories: Computers (monitor and keyboard), Mobiles (smartphone), Laptops (open laptop), and Accessories (various USB drives). Each category has a brief description and a link to find more information.



```
D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>kubectl get services
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
frontend   NodePort   10.97.253.223  <none>        8085:30083/TCP  25d
kubernetes ClusterIP  10.96.0.1    <none>        443/TCP      32d
nginx     LoadBalancer  10.101.187.143  localhost     80:30364/TCP  32d

D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>kubectl delete frontend -n default
error: the server doesn't have a resource type "frontend"

D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>kubectl delete service frontend -n default
service "frontend" deleted

D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>helm install ecommerce-chart-deploy .
I1022 11:19:54.710197 26576 warnings.go:110] "Warning: annotation \"kubernetes.io/ingress.class\" instead"
NAME: ecommerce-chart-deploy
LAST DEPLOYED: Wed Oct 22 11:19:53 2025
NAMESPACE: default
STATUS: deployed
REVISION: 1
DESCRIPTION: Install complete
TEST SUITE: None

D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>kubectl get deployments
NAME      READY  UP-TO-DATE  AVAILABLE  AGE
backend  2/2    2          2          12m
frontend 2/2    2          2          12m
mysql    1/1    1          1          12m
nginx    1/1    1          1          32d

D:\CICD\Practical 8\ecommerce-chart\ecommerce-chart>
```