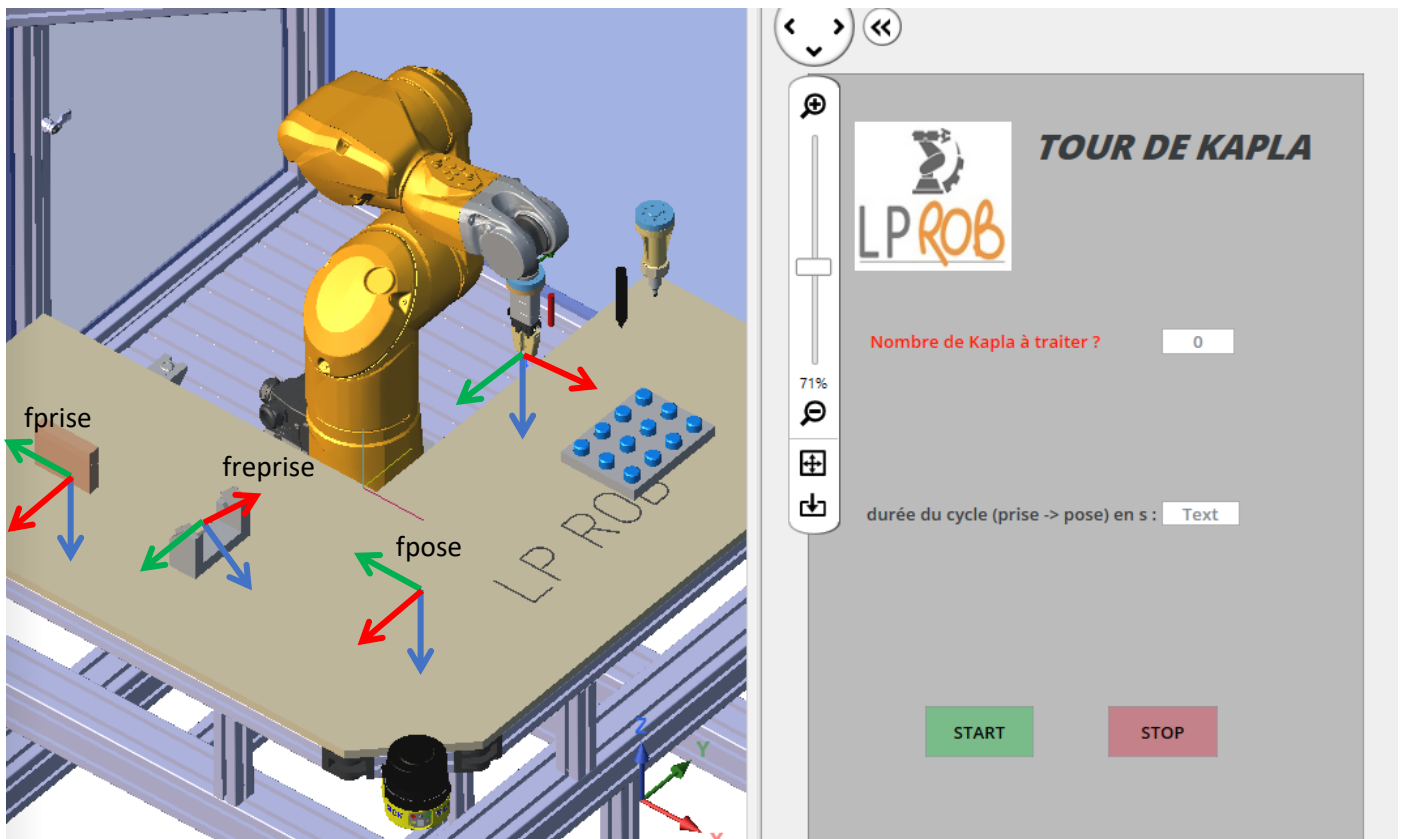


Tour de Kapla



Données

- bool
 - bBtnStartDisable
 - bBtnStopDisable
 - bEnd
 - bRun
 - bTxtNbkaplaDisable
 - dio
 - dDoCLOSE
 - dDoOPEN
 - frame
 - fPose
 - fprise
 - fReprise
 - jointRx
 - jHome

- mdesc
 - mLent
 - mNomSpeed
 - 3/4 num
 - nCurrentKapla
 - ndelay
 - nNbKapla
 - nstart
 - pointRx
 - pPose
 - pPrise [2]
 - pPrise[0]
 - pPrise[1]
 - pReprise
 - pReprise2

- Ab string
 - sColorSTART
 - sColorSTOP
 - tool
 - tPince
 - tToolcalib
 - trsf
 - trAppro
 - trDecal
 - trPose
 - trPrise
 - trReculprise

ClickSTOP ()

```
begin
  bRun=false
  sColorSTOP="#FF001E"
end
ClixkSTART ()
begin
  bRun=true
  bBtnStartDisable=true
  bBtnStopDisable=false
  bTxtNbkaplaDisable=true
  sColorSTART="#10CC00"
end
```

Cycle ()

```
begin
  while !bEnd
    // Wait cycle is started
    popUpMsg("Saisir le nombre de Kapla ; appuyer sur Strat et Move/Hold")
    wait(bRun)
    if !bEnd
      // Start movements
      taskCreate "tMove", 10, Mouvements()
      wait(taskStatus("tMove") == 1)
      // Wait movements end
      wait(taskStatus("tMove") == -1)
      // Reset cycle counter
      nCurrentKapla=0
      bRun=false
      bBtnStartDisable=false
      bBtnStopDisable=true
      bTxtNbkaplaDisable=false
      sColorSTART="#7ABB8A"
      sColorSTOP="#C48189"
    endif
  endwhile
end
```

Mouvements ()

```
num npaire
pointRx pPrise1
pointRx pPose1
```

```

begin
  pPrise[0]={{0,0,-(nNbKapla-1)*8,0,0,0},{ssame,esame,wsame}}
  pPrise1=pPrise[0]
  trPrise={0,0,0,0,0,0}
  pPose1=pPose
  trPose={0,0,0,0,0,0}
  ndelay=0
  while(bRun==true) and (nCurrentKapla<nNbKapla)
    nCurrentKapla=nCurrentKapla+1
    //affectation de l'heure à nstart
    nstart=clock()
    //Approche point de prise
    movej(appro(pPrise1,trAppro),tPince,mNomSpeed)
    //aller au point de prise en linéaire
    movel(pPrise1,tPince,mLent)
    //Fermer la pince
    close(tPince)
    //recul et décalage angulaire après prise
    movel(appro(pPrise1,trReculprise),tPince,mNomSpeed)
    movel(appro(pPrise1,trAppro),tPince,mNomSpeed)
    //appui du kappla dans la pince en appuyant sur la table
    movej(appro(pPrise[1],trAppro),tPince,mNomSpeed)
    movel(pPrise[1],tPince,mLent)
    movel(appro(pPrise[1],trAppro),tPince,mNomSpeed)
    //aller au poste de reprise
    movej(appro(pReprise,trAppro),tPince,mNomSpeed)
    movel(pReprise,tPince,mLent)
    open(tPince)
    movel(appro(pReprise,trAppro),tPince,mNomSpeed)
    movej(appro(pReprise2,trAppro),tPince,mNomSpeed)
    movel(pReprise2,tPince,mLent)
    close(tPince)
    movel(appro(pReprise2,trAppro),tPince,mNomSpeed)
    trPrise={0,0,8,0,0,0}
    pPrise1=compose(pPrise1,fprise,trPrise)
    npaire=roundUp(nCurrentKapla/2)
    if npaire%2==0
      trPose={power(-1,nCurrentKapla)*45,0,(1-npaire)*22.5,0,0,0}
    else
      trPose={0,power(-1,nCurrentKapla)*45,(1-npaire)*22.5,0,0,-90}
    endif
    pPose1=compose(pPose,fPose[0],trPose)
    movej(appro(pPose1,trAppro),tPince,mNomSpeed)
    movel(pPose1,tPince,mLent)
    open(tPince)
    movel(appro(pPose1,trAppro),tPince,mNomSpeed)
    ndelay=clock()-nstart
  endwhile
  movej(jHome,tPince,mNomSpeed)
  waitEndMove()
end

```

```
start ()
```

```
begin
```

```
  // Init variables
```

```
  nCurrentKapla=0
```

```
  nNbKapla=10
```

```
  bEnd=false
```

```
  bRun=false
```

```
  bBtnStartDisable=false
```

```
  bBtnStopDisable=true
```

```
  bTxtNbkaplaDisable=false
```

```
  sColorSTART="#7ABB8A"
```

```
  sColorSTOP="#C48189"
```

```
  // Be sure to be on the start point
```

```
  resetMotion(jHome)
```

```
  // Be sure gripper is open before starting
```

```
  open(tPince)
```

```
  // Display userpage
```

```
  userPage("IHMKapla")
```

```
  // Run
```

```
  call Cycle()
```

```
end
```

```
stop ()
```

```
begin
```

```
end
```