end user request from web

GeneratedUrlManager.UrlProducer
producer thread

BulkManager bulkManager

ShortUrlService

ShortUrlService
getFullUrl

prepare short url

consume short urls

BlockingQueue

take url from db

BulkIdManager

reserveUrlForConsumption(size)

store short long url entity

DbInitializer

init()
generate()

produce init short urls
bulk job
as an independent app

JPARepository

JPARepository

JPARepository

DB
KeyValue Storage