

USER MANUAL FOR UMLPDA TRANSFORMATION ENGINE

1. Instructions

1.1. UMLPDA Transformation Engine

Download UMLPDA (UML to data-driven Applications) transformation engine from github.

Extract **UMLPDA-te.zip** file. You will find a Folder as shown in *Figure 1* below.

Name	Date modified	Type	Size
org.eclipse.acceleo.module.ServerlessDD...	30/04/2019 6:43 AM	File folder	

Figure 1: Files in “UMLPDA-te” folder

Open Eclipse and Import the folder as shown in *Figure 2 and Figure 3*.

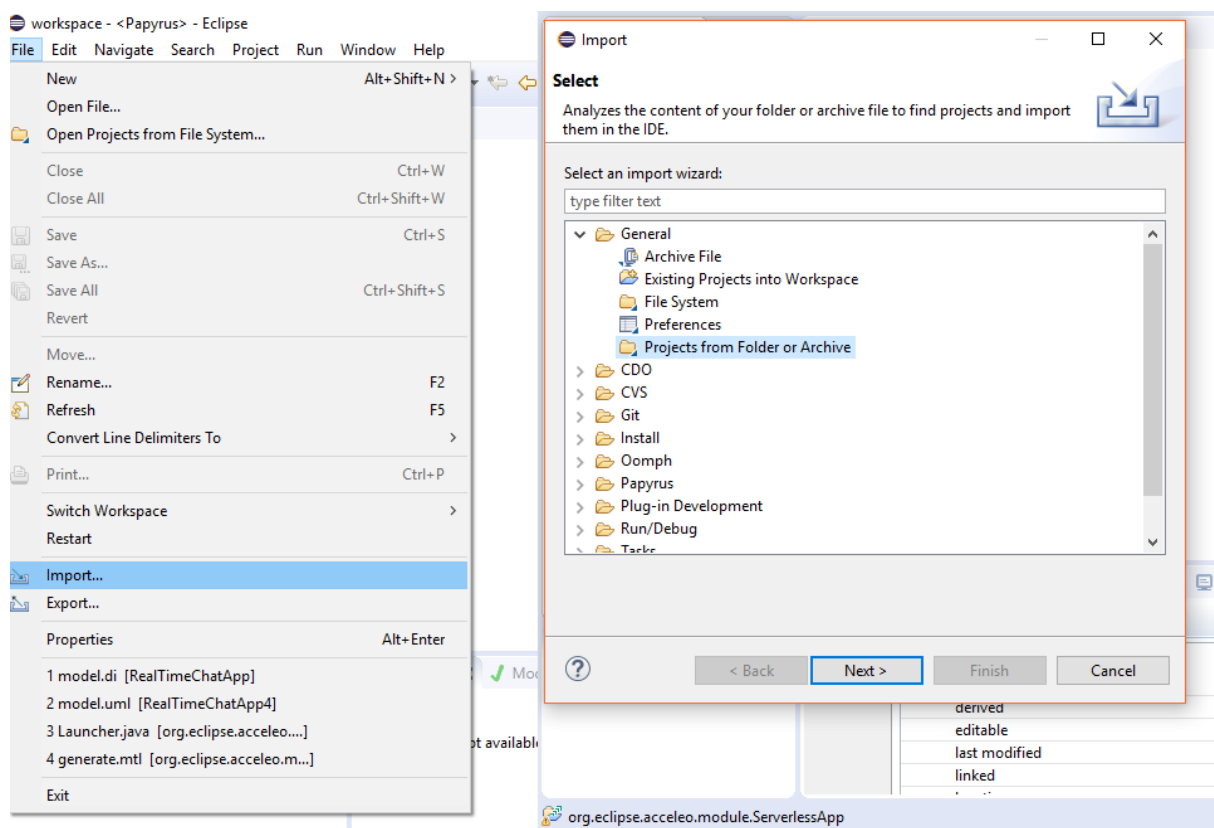


Figure 2: Import “UMLPDA-te” folder

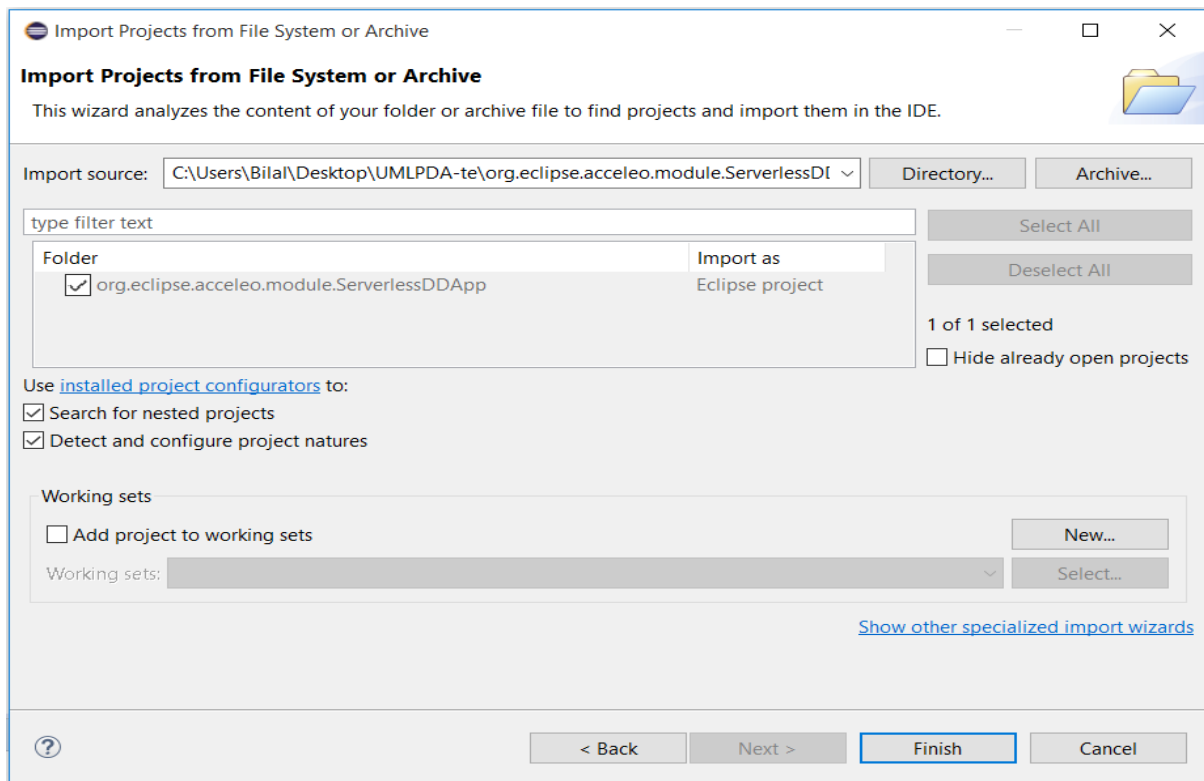


Figure 3: Importing Project

By clicking finish, the folder will be added to the eclipse workspace as shown in Figure 4.

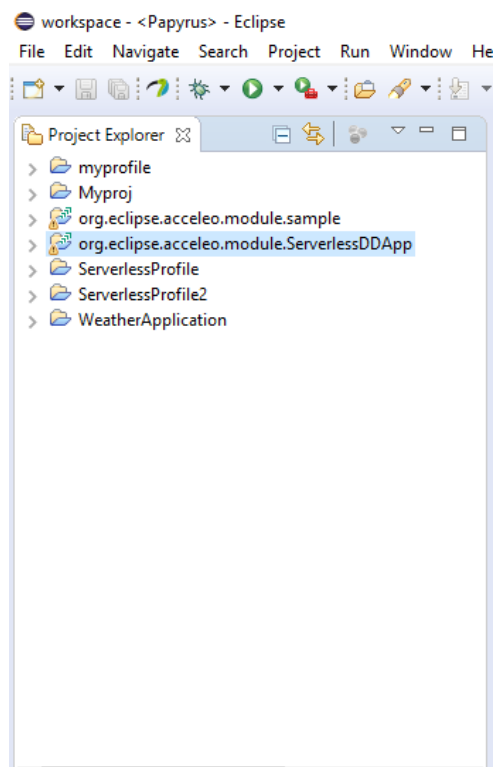


Figure 4: Project Added to Workspace

Similarly, import UMLPDA profile and Case studies from the folders in workspace.

1.2. Sample Case Studies

Extract **SampleCaseStudies.zip** file. You will find three sample case studies “Events Calendar Application”, “Movies Application” and “Real time Chat Application” as shown in **Figure 5**.

Name	Date modified	Type	Size
EventsCalendarApp	30/04/2019 7:10 AM	File folder	
MoviesApplication	30/04/2019 7:10 AM	File folder	
RealTimeChatApp	30/04/2019 7:10 AM	File folder	

Figure 5: Sample Case Studies folder

2. Prerequisites for UMLPDA Transformation Engine

It is mandatory to install **Java Runtime Environment (JRE) version 8 or above** to execute UMLPDA Engine.

3. Execution of UMLPDA Transformation Engine

Right Click the folder in the workspace and Click Run as Java Application to execute the UMLPDA Transformation Engine as shown in figure 6 and 7.

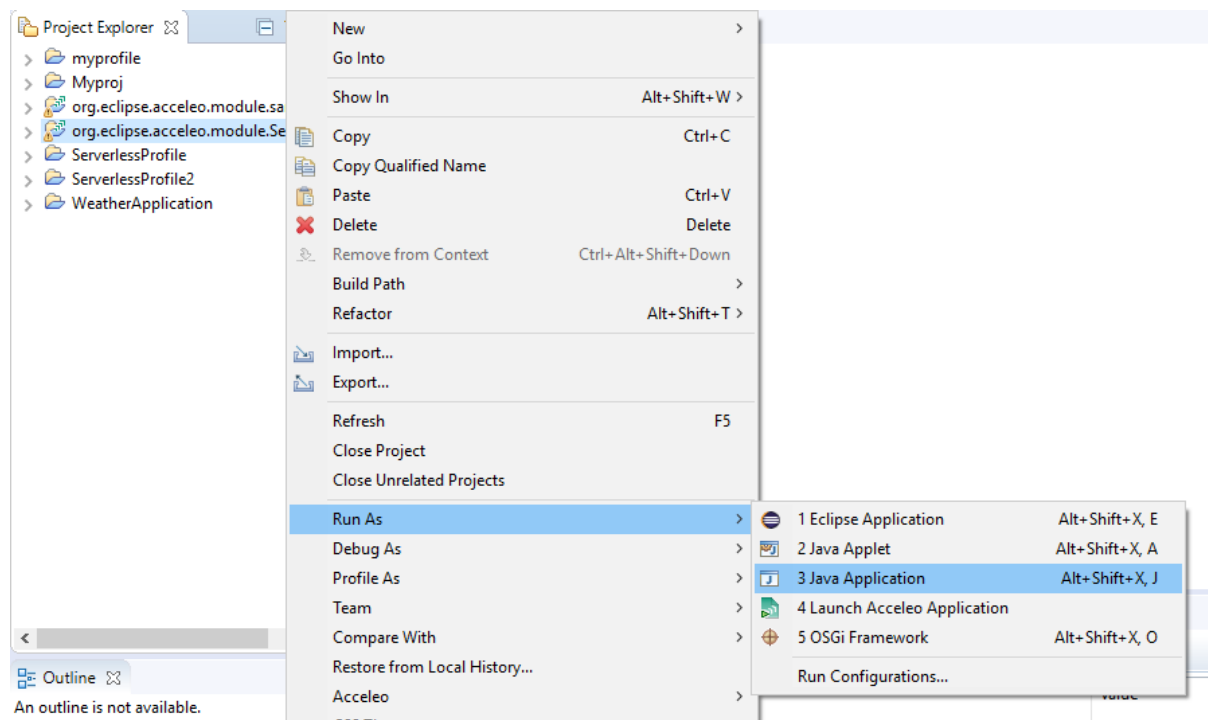


Figure 6: Run-As Java Application

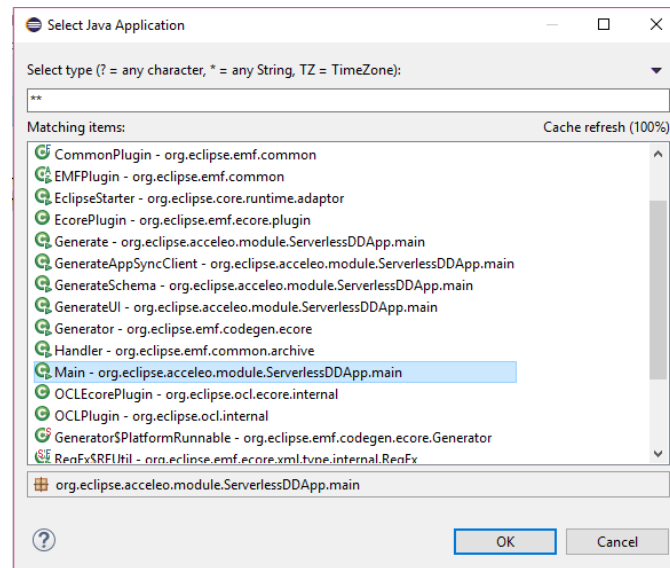


Figure 7: Selecting Java Application

Click Ok. The transformation Engine interface opens as shown in **Figure 8**.

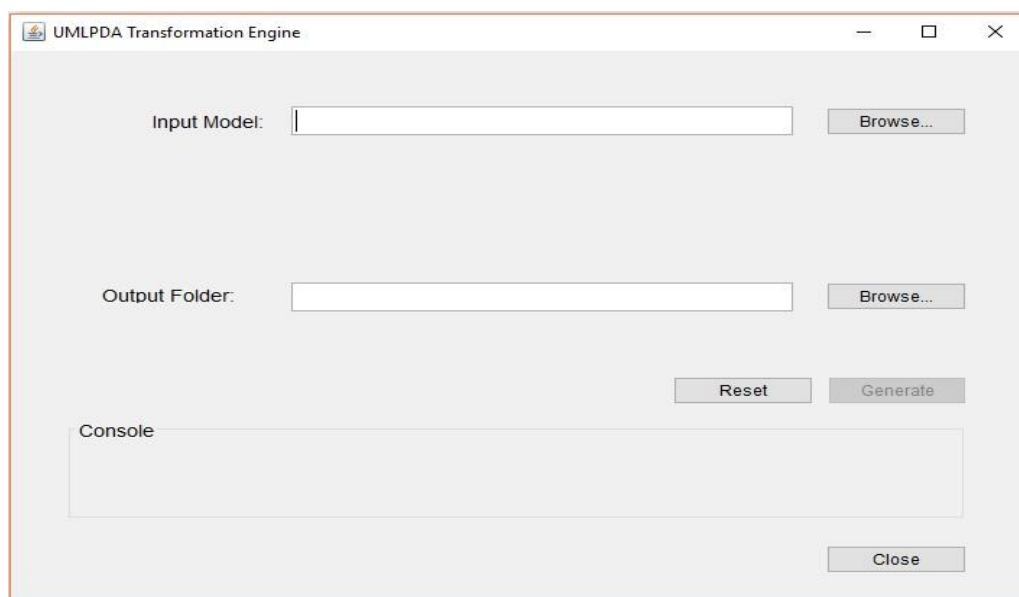


Figure 8: Interface of UMLPDA

Input Model: Browse button is used to select the UML model for the case study.

Destination Folder: Browse button is used to specify the destination folder for the generated files.

Reset: This button clears all the current selections to define new configurations.

Generate: This button transforms the selected UML model into the required artifacts. It is mandatory to fill all the above field in order to click generate button. **Status:** This displays the status of current transformations i.e. Notification of generated files or Files Generated with Errors (in case of any problem in transformation).

Close: This button closes the interface.

The UML model can be selected using browse button against each selection. **Figure 9** shows the selection of Events Calendar Application UML model using browse button.

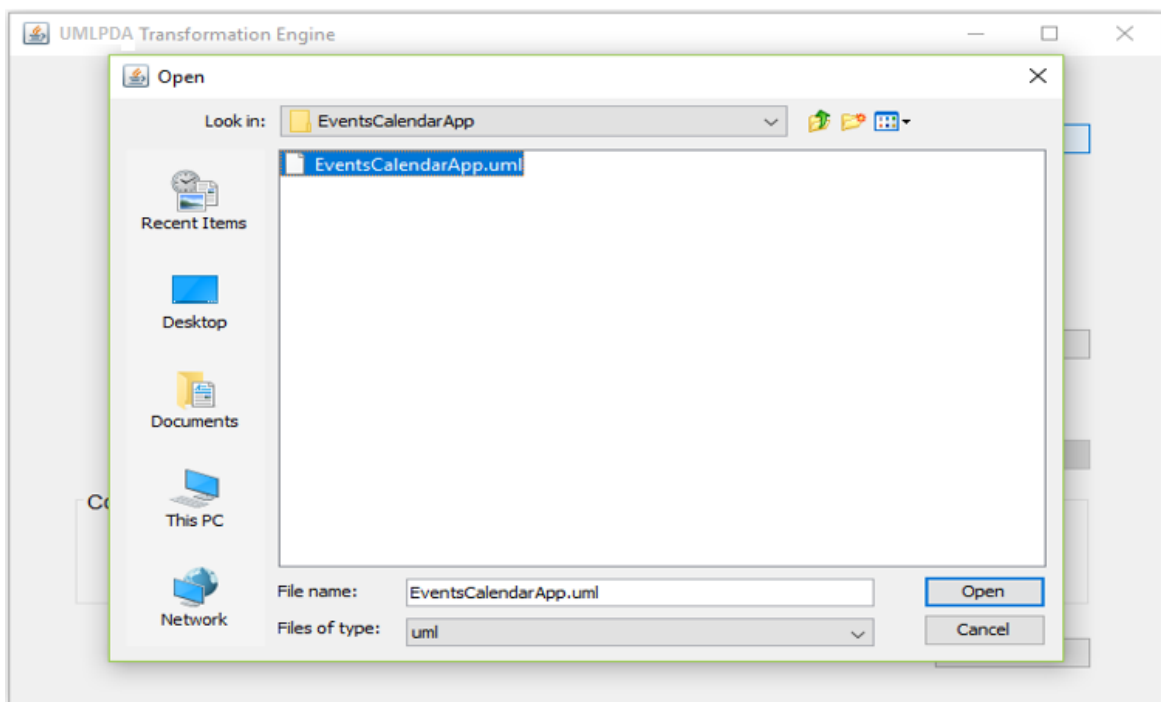


Figure 9: Selection of Events Calendar Application model using browse button

The Events Calendar Application models can be transformed into required artifacts through *Generate* Button as shown in **Figure 10**.

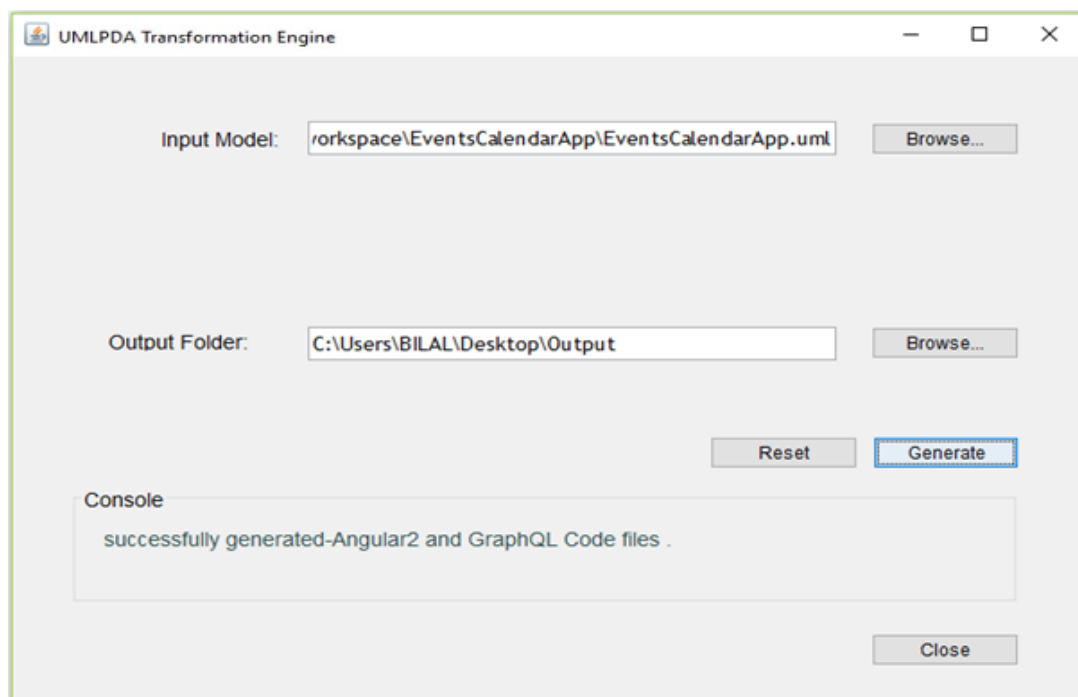


Figure 10: Generating Code Artifacts for Events Calendar Application Model

The screenshot for the output folder containing generated files is shown in **Figure 11**.

Frontend				
Name	Date	Type	Size	Length
GraphQL	30/04/2019 8:18 AM	File folder		
types	30/04/2019 8:19 AM	File folder		
allevts.component	30/04/2019 8:19 AM	Opera Web Docu...	2 KB	
AllEventsComponent	30/04/2019 8:17 AM	TS File	3 KB	
ApplicationRootCo...	30/04/2019 8:17 AM	TS File	2 KB	
auth.component	30/04/2019 8:19 AM	Opera Web Docu...	1 KB	
eventcomments.co...	30/04/2019 8:19 AM	Opera Web Docu...	1 KB	
EventCommentsCo...	30/04/2019 8:17 AM	TS File	2 KB	
EventsCalendarApp	30/04/2019 8:17 AM	Opera Web Docu...	1 KB	
newcomment.com...	30/04/2019 8:19 AM	Opera Web Docu...	1 KB	
NewCommentCom...	30/04/2019 8:17 AM	TS File	2 KB	
newevent.compone...	30/04/2019 8:18 AM	Opera Web Docu...	2 KB	
neweventCompone...	30/04/2019 8:17 AM	TS File	3 KB	
showevents.compo...	30/04/2019 8:19 AM	Opera Web Docu...	1 KB	
showeventsCompo...	30/04/2019 8:17 AM	TS File	1 KB	
viewevent.compon...	30/04/2019 8:19 AM	Opera Web Docu...	1 KB	
VieweventCompon...	30/04/2019 8:17 AM	TS File	1 KB	
Backend				
Name	Date modified	Type	Size	
schema	30/04/2019 9:07 AM	GRAPHQL File	2 KB	
getEventResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
getEventResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	
deleteEventResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
deleteEventResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	
createEventResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
createEventResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	
commentsResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
commentsResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	
commentOnEventResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
commentOnEventResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	
AllEventsResolver.response	30/04/2019 9:06 AM	RESPONSE File	1 KB	
AllEventsResolver.request	30/04/2019 9:06 AM	REQUEST File	1 KB	

Figure 11: Output folder containing generated files