**Key Changes in the modified files**

Here is a summary of the key changes. It will also be explained in class. Feel free to use these files in place of the original files in the starter code.

PublisherAppln.py and PublisherMW.py

PublisherAppln and PublisherMW now use the event\_loop in the way it really should be used. We also make effective use of the timeout to distinguish between a call made by the application object versus a reply coming from remote entity that needs to be handled by the application object. In addition, we now have a way to track what stage of the lifecycle is the publisher application in. We track this via a set of enumerated constants. Depending on what state we are in, we take the necessary action.

We also added a command line parameter called num\_topics. This way we can control how many topics that publisher publishes (instead of creating this at random)

topic\_selector.py

The selection of topics is now driven by a parameter supplied by the caller. Since our max num of topics is 9, a caller can provide any value between 1 and 9.

discovery.proto

Updated message definitions that use enums and nested structs as opposed to all string fields.

discovery\_pb2.py

File generated by protoc compiler after running it on the discovery.proto file.