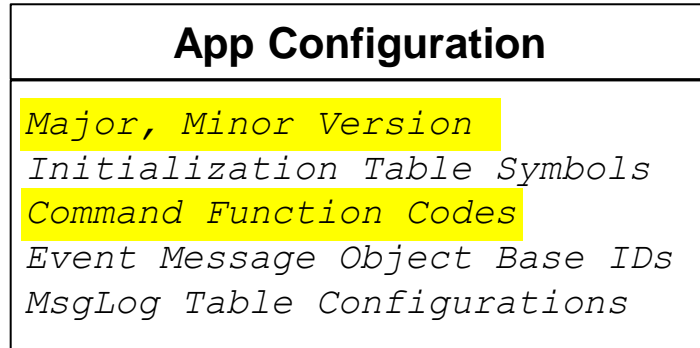


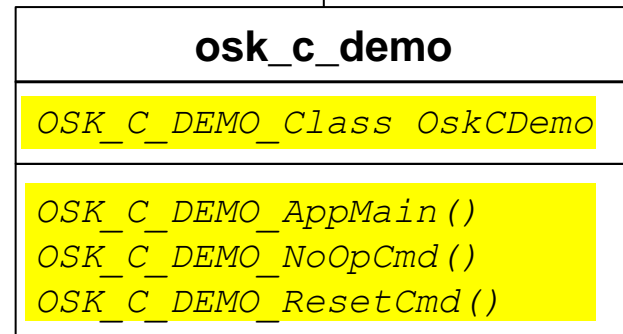
- **Illustrate a minimal application that uses the OSK C app framework (osk_c_fw)**
- **Create a “Hello World” application that will serve as the base for all subsequent lessons**
 - Provides main app runtime loop that pends indefinitely on its command pipe
 - Scheduler configured to send a 1Hz execution packet and a 4 second housekeeping request packet
- **Implements two commands**
 - Noop command that ends an event message with the app’s version identifier
 - A reset command that clears the app’s command valid and invalid counters
- **Housekeeping packet defined with final solution**
 - Unused telemetry items loaded with zero
 - Alleviates the need to update the COSMOS telemetry packet definition in future lessons
- **Creates all cmake, JSON table, and COSMOS artifacts so all future lessons only change files in osk_c_tutor/fsw**

Lesson 1 Design Highlights

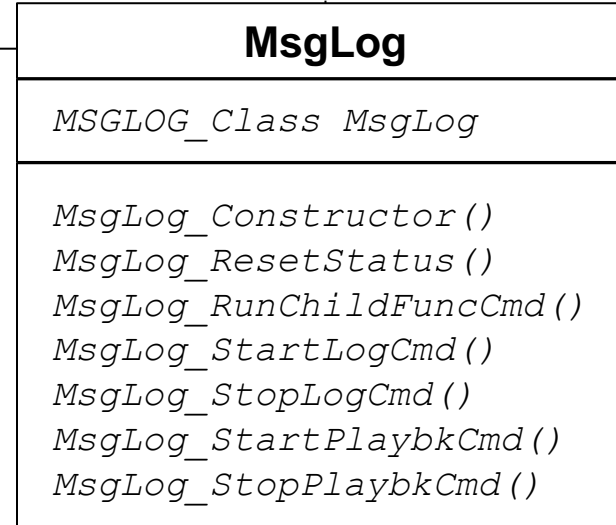
app_cfg.h



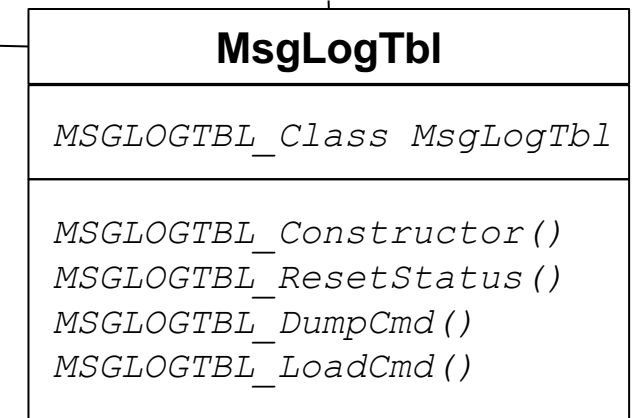
osk_c_demo.h
osk_c_demo.c



msglog.h
msglog.c



msglogtbl.h
msglogtbl.c



OSK_C_DEMO DEMO_OPS_SCREEN

OSK C Demo

Commands

No Op	Reset	Load Tbl	Dump Tbl
Start Log	Stop Log	Start PlayBk	Stop PlayBk

Housekeeping Status

Cmd Cnt

Cmd Err

Child Cmd Cnt

Child Cmd Err

Log Ena

Log Count

Playbk Ena

Filename

Display

Message Log File Playback

Entry

Pri Header

Scripts

Functional Test

Ops Example

Flight Event Messages

Issue NoOp command

- Observe valid command counter increments and event message with version ID

Issue Reset command

- Observe command counter reset to 1