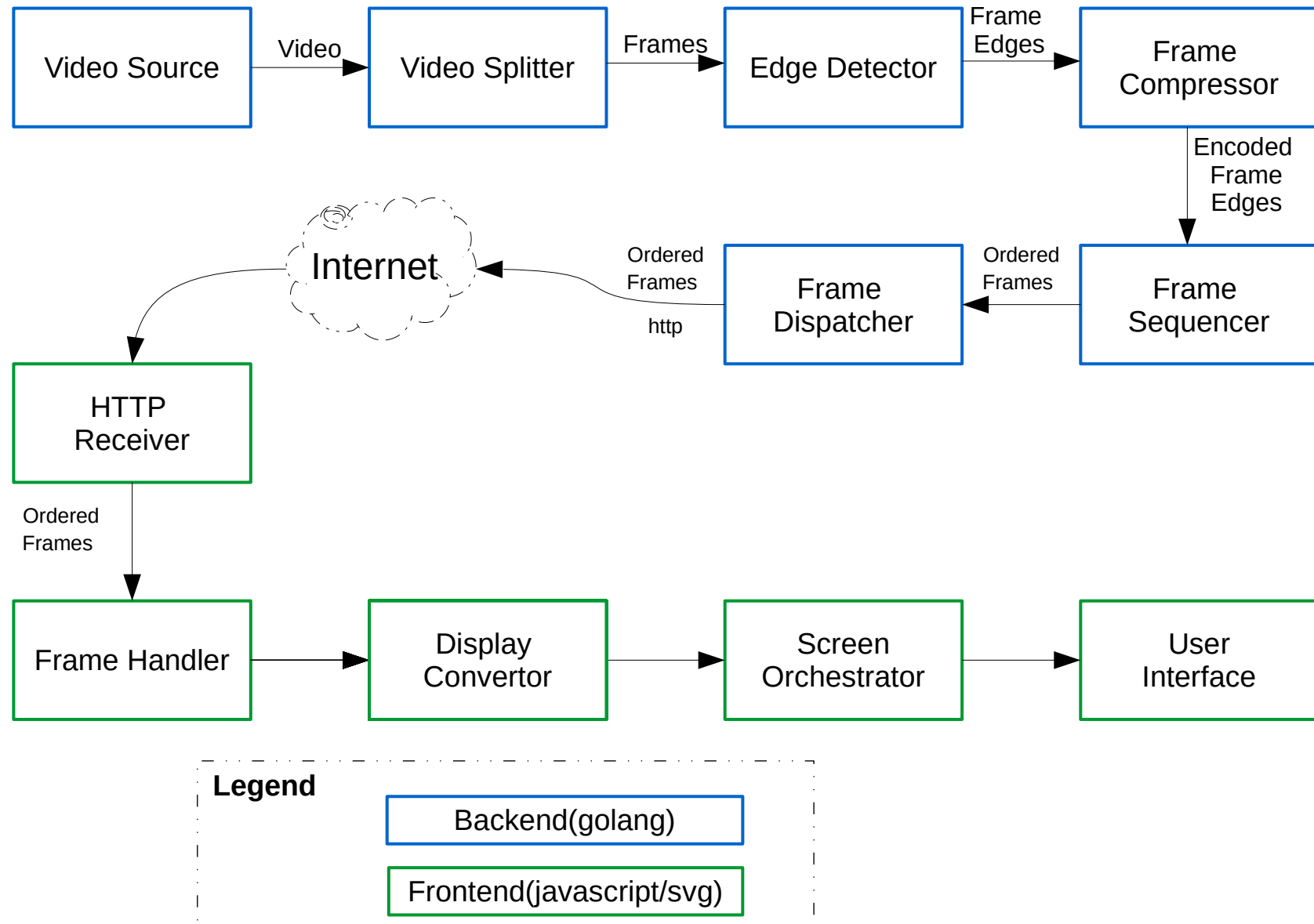


Go Parallel Processing

What is this ?

- Show case parallel processing with Go
 - Goroutines, channels, map-reduce, synchronization
- Message passing between go threads
- Message passing for thread synchronization
- Video processing with Go
- Video transmission in low bandwidth networks
-

High Level Architecture



Files and their functions

#	File name	Description
1	main.go	<ul style="list-style-type: none">- Takes commands line parameters- Orchestrates all the backend activities
2	video_source.go	<ul style="list-style-type: none">- captures video from camera or file
3	video_splitter.go	<ul style="list-style-type: none">- converts input video into image frames
4	edge_detector.go	<ul style="list-style-type: none">- detects edges in each image frame
5	frame_compressor.go	<ul style="list-style-type: none">- compresses the detected edges into a byte array
6	frame_sequencer.go	<ul style="list-style-type: none">- if edge detection and frame compression is done in parallel mode, the frames may be out of sequence. So here, we sequence the frames in the correct order
7	frame_dispatcher	<ul style="list-style-type: none">- offloads the ordered frames to an http server, so that they can be sent to the front end