Estimation

No.	Requirement	Priority	Estimate (days)	Remarks
	Session Management			
1	The compositor system can join the Mediasoup room using the session ID	A	1	
2	When a participant join an active session, add the participant's video to the compositor and audio to the audio mixer	A	3	
3	When a participant leave the session, remove the participant's video from the compositor and audio from the audio mixer	A	3	
4	When a participant disable their camera, add a static image to the compositor	A	2	
5	When a participant enable their camera, add the participant's video to the compositor	A	2	
6	When all participants have left the room, stop the compositor session	A	0.5	
	Audio Mixing			
7	When a participant mute their mic, remove the participant's audio from the audio mixer	A	3	
8	When a participant unmute their mic, add the participant's audio from the audio mixer	A	3	
9	When a background music is applied to the session, add the background music audio to the audio mixer	A	1	
10	When a background music is removed from the session, remove the background music audio from the audio mixer	A	0.5	
	Compositing Layouts			
11	When the session layout is set to full screen, the compositor should show the host's primary video and fill the entire screen	A	1	

12	When the session layout is set to contain, the compositor should show the first 2 videos in the session keeping the aspect ratios	A	0.5	
13	When the session layout is set to cover, the compositor should show the first 2 videos in the session scaling and cropping to fit the screen	A	0.5	
14	When the session layout is set to half screen, the compositor should show the first 3 videos in the session, scaling and cropping to fit the screen	A	0.5	
15	When the session layout is set to picture-in-picture, the compositor should show the first 2 host's videos in the session and keeping the aspect ratios	A	0.5	
16	When the session layout is set to thumbnail, the compositor should place the first host video on the screen and rest of the videos at the bottom keeping the aspect ratio	A	0.5	
17	When the session layout is set to thumbnail, the compositor should place the first host video on the screen and rest of the videos at the right size of the screen keeping the aspect ratio	A	0.5	
	Compositing Graphics			
18	When an overlay image is set in the session, the compositor should place the overlay image on the foreground of the screen	A	1	
19	When a background image is set in the session, the compositor should place the background image behind the camera videos	A	1	
20	When a video background image is set in the session, the compositor should place the video background image behind the camera video	A	1	
21	Backgrounds can only be composited on full screen and contain layouts	A	0.5	
22	When a ticker message is set in the session, the compositor should place a ticker at the bottom of the screen	A	1	
23	When an overlay chat messages are set in the session, the compositor should place the chat messages on the foreground of the screen	A	1	
24	When a QR code image is applied to the session, add the QR code image to the compositor	A	1	
	Streaming			
25	The compositor should support NVENC for GPU-accelerated H.264 encoding	A	3	

25	of the output stream	A	5	
26	The compositor should be able to stream to any RTMP ingest at 1080p resolution and 30 fps	A	0.5	
27	The compositor should be able to stream to Facebook RTMPS ingest at 1080p resolution and 30 fps	A	0.5	
28	The compositor should be able to stream to YouTube RTMP ingest at 1080p resolution and 30 fps	A	0.5	
29	The compositor should be able to stream to Twitch RTMP ingest at 1080p resolution and 30 fps	A	0.5	
30	The compositor should be able to stream to Instagram RTMP ingest at 720p resolution and 30 fps	A	0.5	
31	The compositor should be able to support 500 simultaneous streaming sessions	A	5	
	Integration Testing			
32	Integration test with CMS and fixes	A	10	
		Total Estimate	50	