**TPAC 2023** 

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Shared Media Experiences

SharePlay

MediaSessionCoordinator API

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MediaSessionCoordinator API

## MediaSession Coordinator Shared Media Experiences

- Characteristics
  - Coordinated playback
  - Shared playback controls
  - Group communication

- Examples
  - SharePlay
  - Google Duo live sharing
  - Watch Party, GroupWatch

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#### MediaSession Coordinator SharePlay

- Based on Group FaceTime
- Supported by GroupActivities public framework
- Watch Together, Listen Together, Screen Sharing, and more
- Group communication via FaceTime or iMessage

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MediaSessionCoordinator API

https://github.com/WebKit/explainers/tree/main/MediaSessionCoordinator

```
interface mixin MediaSessionCoordinatorMixin {
    readonly attribute MediaSessionCoordinator coordinator;
}
```

#### MediaSession Coordinator MediaSessionCoordinator API

```
interface MediaSessionCoordinator : EventTarget {
    Promise<undefined> join();
    undefined leave();

    // closed, waiting, or joined
    readonly attribute MediaSessionCoordinatorState state;
    attribute EventHandler oncoordinatorstatechange;

Promise<undefined> seekTo(unrestricted double time);
    Promise<undefined> play();
    Promise<undefined> pause();
    Promise<undefined> setTrack(DOMString trackIdentifier);
}
```

#### **MediaSessionCoordinator API**

```
coordinator.addEventListener('coordinatorstatechange', (coordinator) => {
    if (coordinator.state === 'waiting')
        coordinator.join();
});

playButton.addEventListener('click', event => {
    if (navigator.mediaSession.coordinator.state === 'joined')
        navigator.mediaSession.coordinator.play();
    else
        video.play();
});
```

```
mediaSession.setActionHandler('play', () => {
    video.play();
});

mediaSession.setActionHandler('pause', () => {
    video.pause();
});

mediaSession.setActionHandler('seekto', details => {
    video.currentTime = details.seekTime;
});
```

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# MediaSession Coordinator Improvements

- Session initiation
- Support for standard controls
- Interoperability

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