Web RTC Eudi APP RFP
- Ver0.5

ComixV's CEO/CTO
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Project goal

- It aims to improve the functions of real-time video calls, whiteboards, and PDF presentations with nurses and customers in existing apps developed with Android and iPhone using WebRTC technology.

1. Eudi Android source analysis content

- Both for nurses and patients are in the form of a simple web view browser

1) Communication between the app and the web

-The interface between the website and the app is possible with javascript, and the interface is declared as eudiApp (Line 93 of MainActivity.java)

- When generating the bridge code of the web view, it seems that eudiApp can be used.

2) Push processing

- For nurses, the fcm library is not included, and for patients, fcm is included, so it seems that push processing is performed.

- fcm's api key is being executed in Utils.getFCMToken(context ctx), receiving processing in MyFirebaseMessagingService.sendNotification,

but no special processing other than viewing the message, we will check whether it is actually being used

Development plan

1) Development direction

- Due to the slow of response from LG Chem, the development was conducted using ClassV, the own platform of ComixV developed as a web view.

- Like LG Chem's platform for nurses and multiple patients, ClassV consists of teachers and multiple students, and We want to add the same function to Class V.

- By creating a branch of the ClassV's code and preparing it as a separate video project, ClassV aims to provide 1:1 video communication and whiteboard functions.

2) Development idea

-In order to minimize the dependence of ClassV or LG Chem, this project was developed as a service of a separate server and developed as a service based on API.

* Scheduled to be provided: Alibaba Ubuntu Server, RDS(mysql), Sub Domain & SSL(https://webrtc.classv.school), separate FCM account

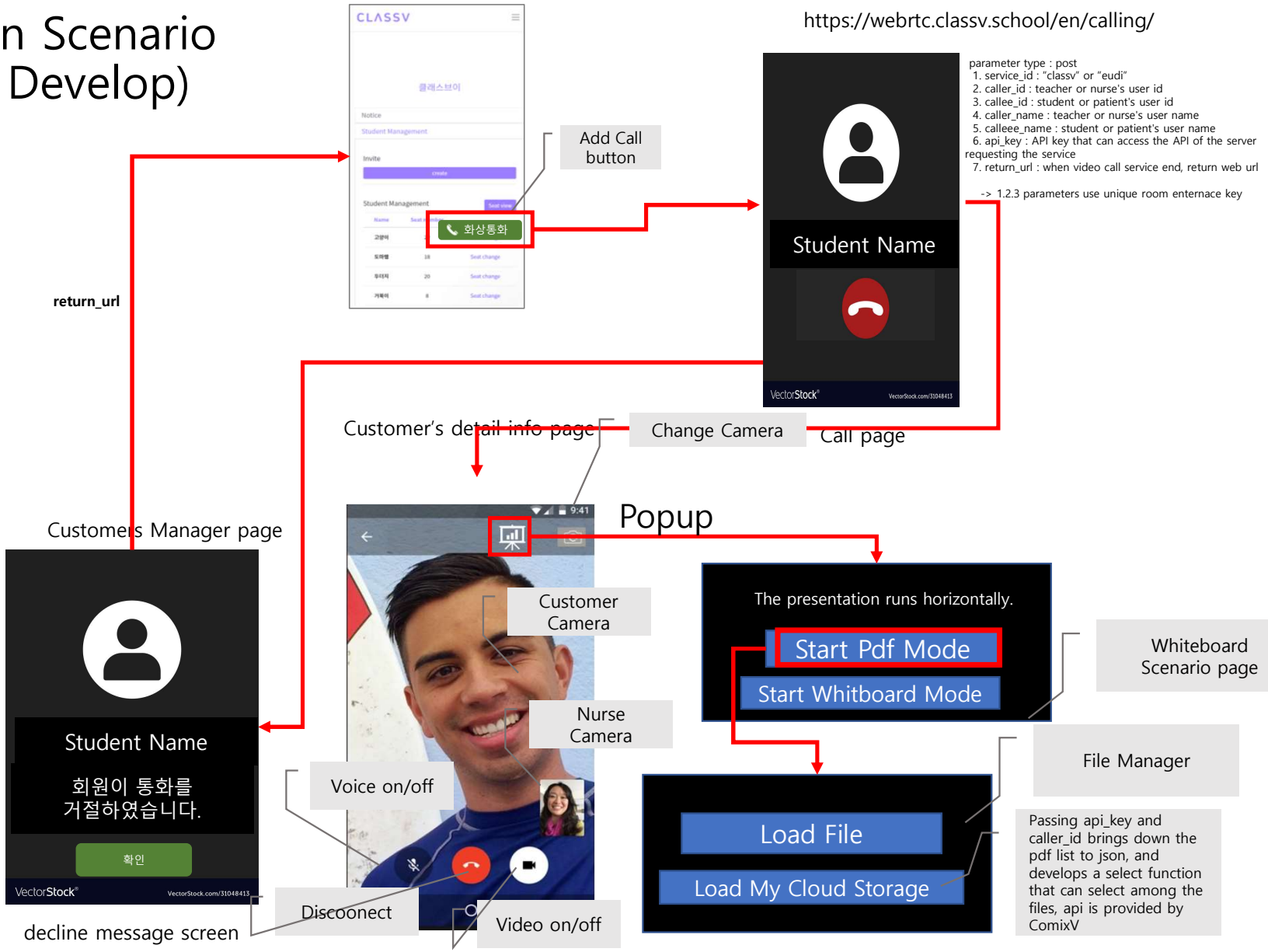
3) Detailed development method

- Currently, ClassV is developed with Unity and UniWebview(Webview asset), so it is difficult to respond to LG Chem. Therefore, the app code uses Eudi(Android and iOS), and develops by changing the web URL and FCM API.

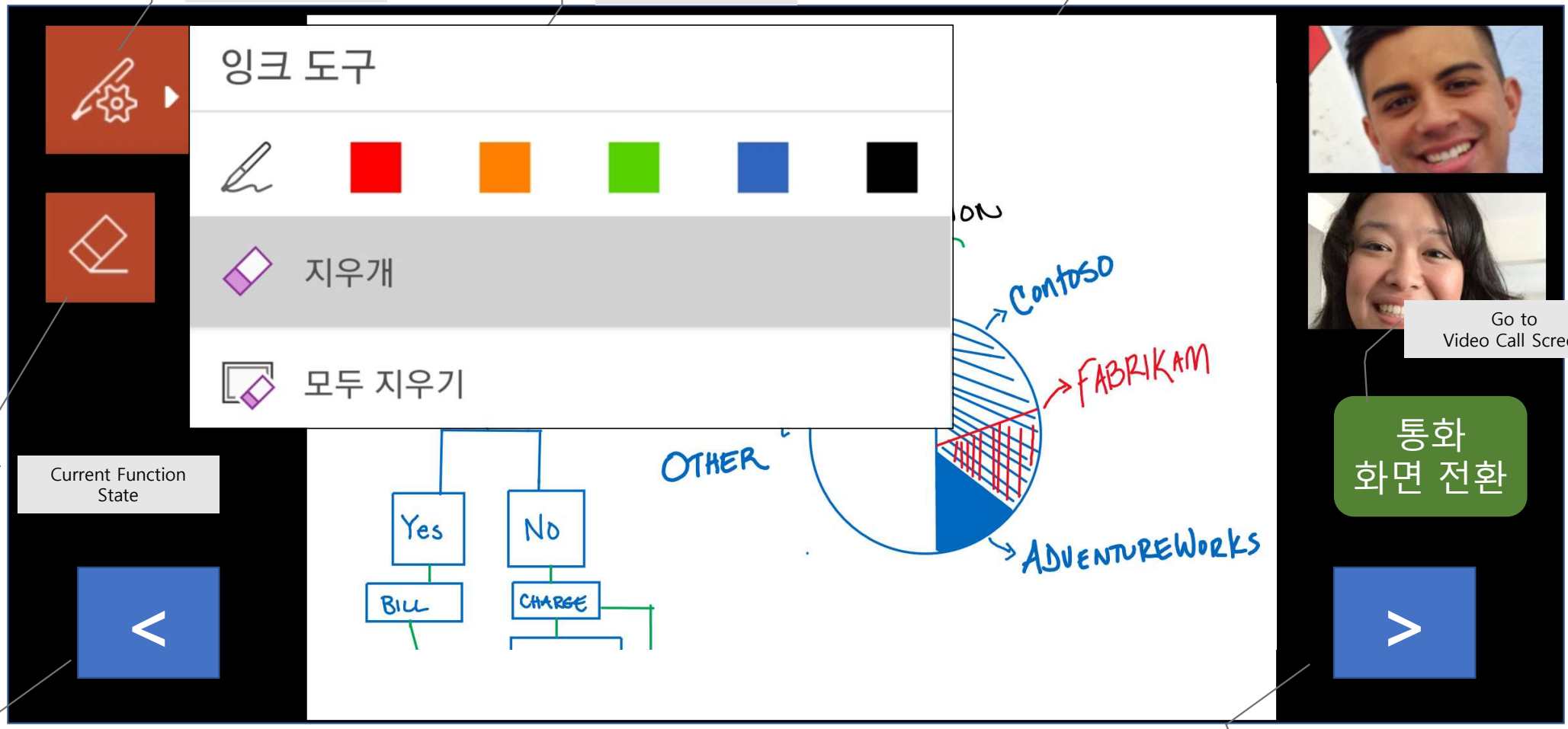
- **The sequence diagram in the back chapter is hidden due to lack of detailed system architect design, and the design at the API level will be delivered to the next version. First of all, please be aware of the web-based development plan, and first review the server and development environment setting that enables WebRTC-based video call and whiteboard development.**
- Please be aware that this document is prior to the internal development team review meeting and is subject to change.

Phase1. Classv Develop

Teacher App Screen Scenario (100% Web based Develop)



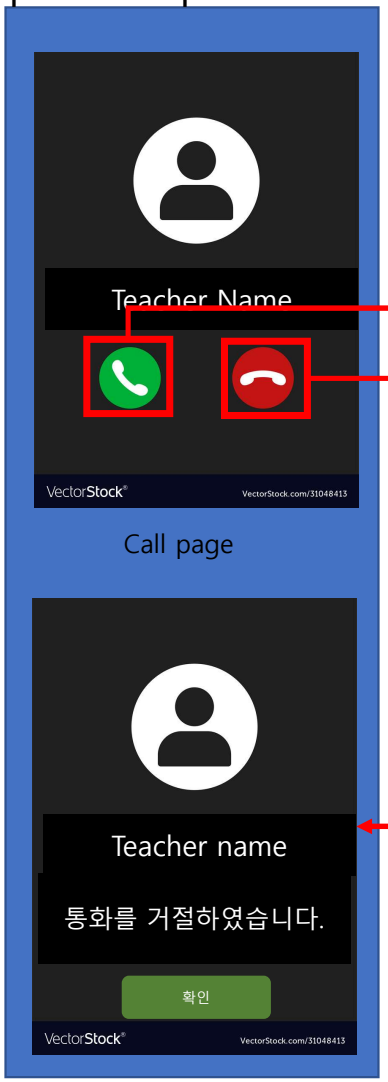
Teacher App Screen Whiteboard Scenario (Web service)



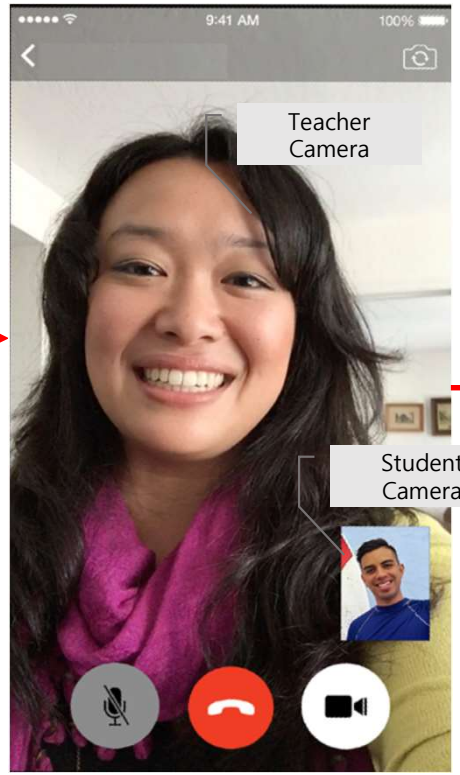
I referenced the UX of the PowerPoint mobile app and removed the highlighter function. From COMIXV

Student App Screen Scenario

App Develop



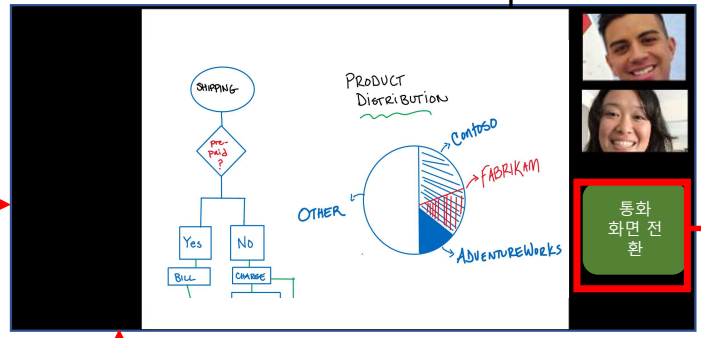
Call page



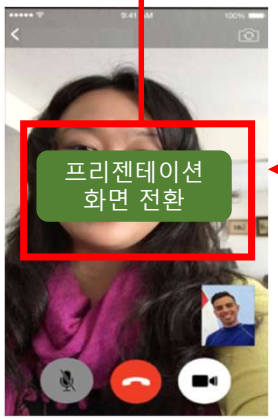
Video Call Screen

WebDevelop

WebDevelop



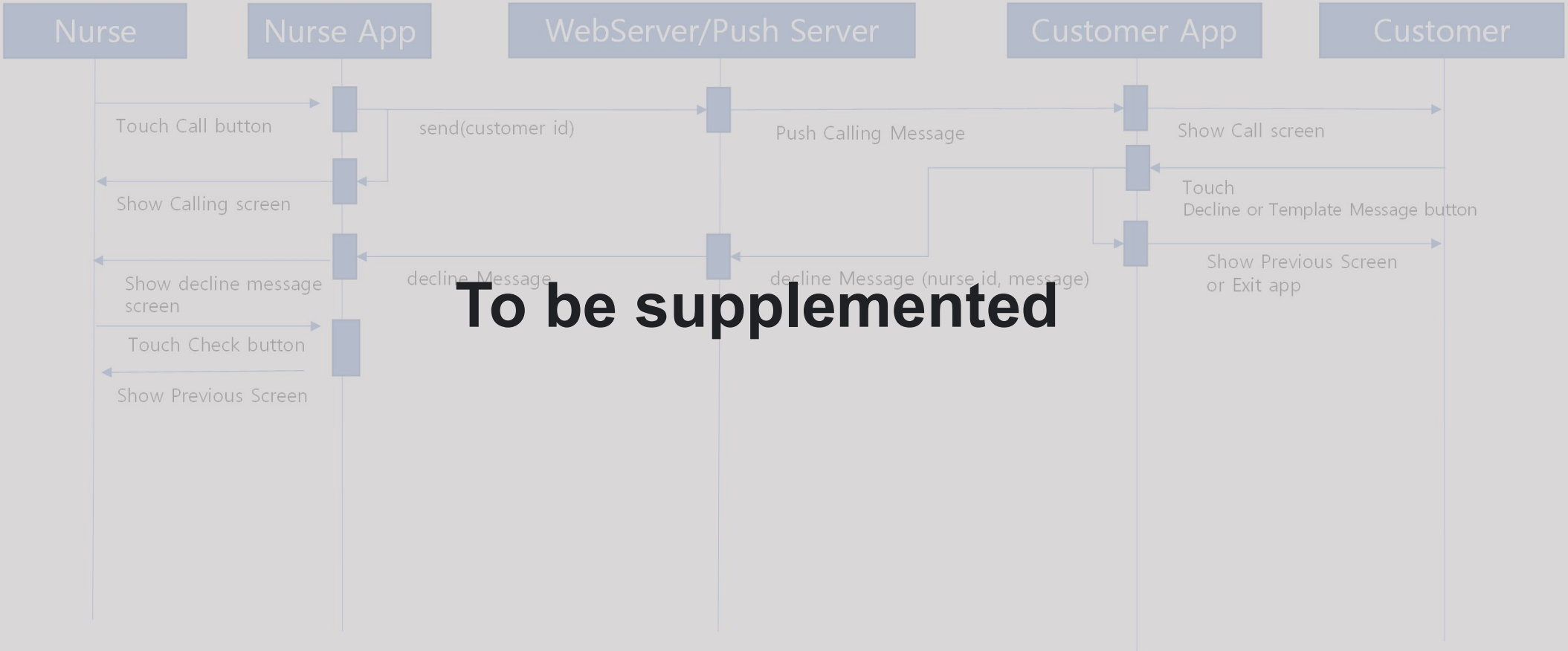
Presentation Screen



Video Call Screen

WebDevelop

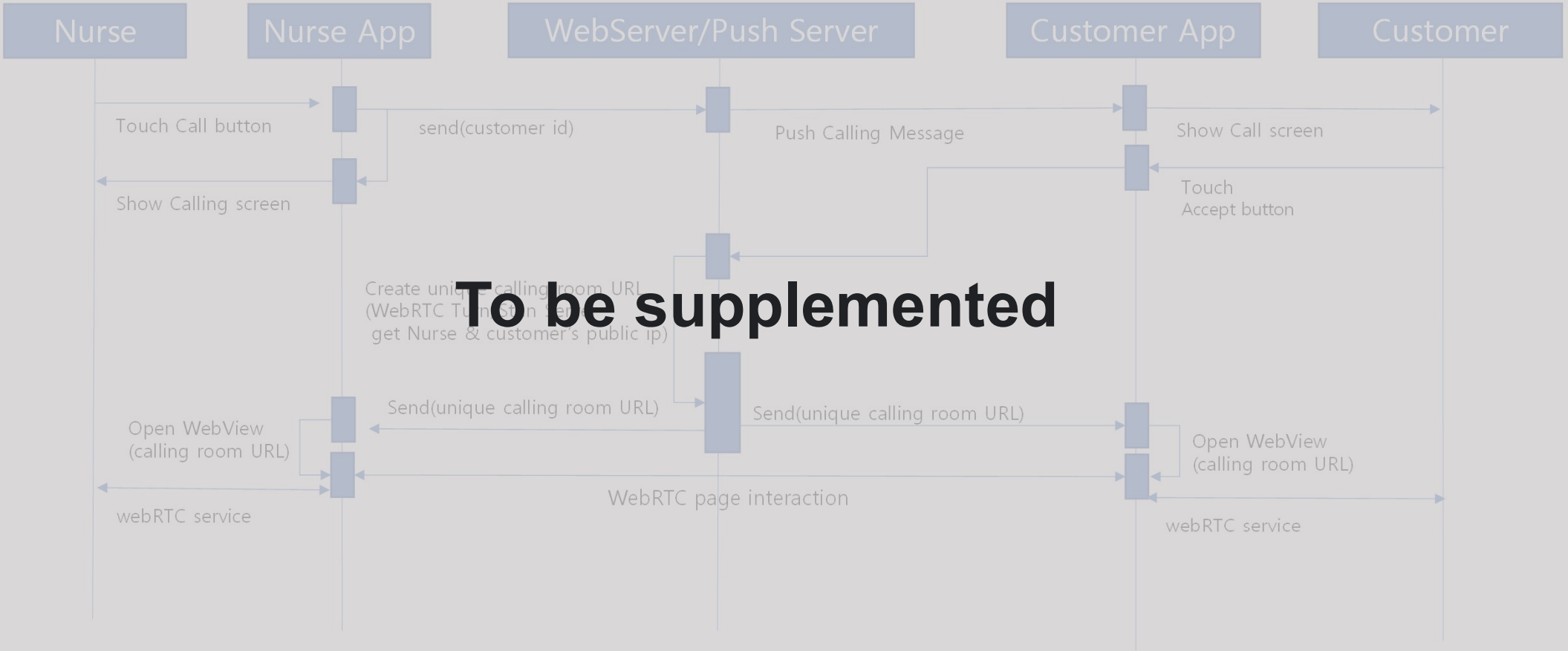
Sequence diagram – Calling & decline



To be supplemented

The sequence diagram was designed as a preliminary eye, and please to add it if there is something missing while developing.

Sequence diagram – Calling & Accept



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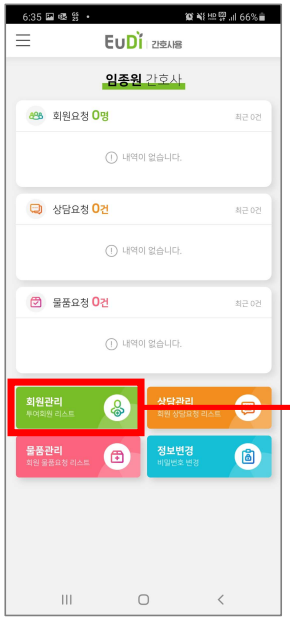
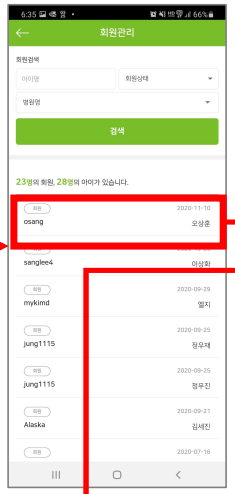
- from comixv -

Phase2. Change Eudi App

Nurse App Screen Scenario



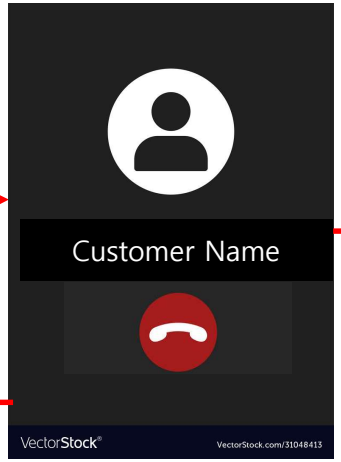
Main page



Customers Manager page

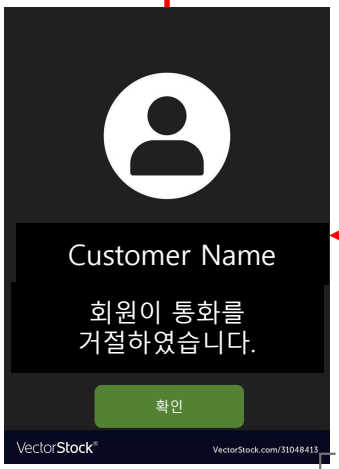
Add Call button

Customer's detail info page

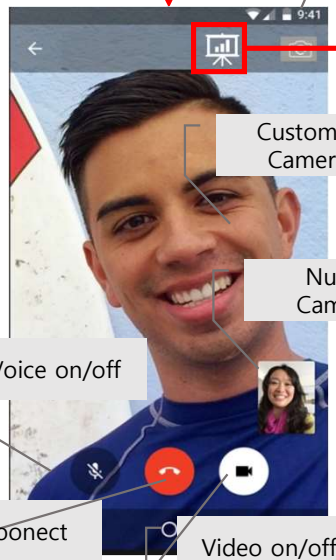


Change Camera

Call page



decline message screen



Popup

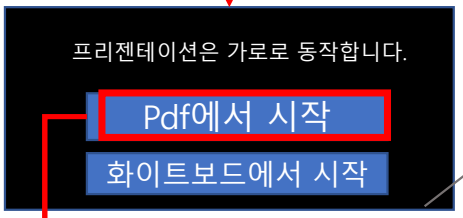
Customer Camera

Nurse Camera

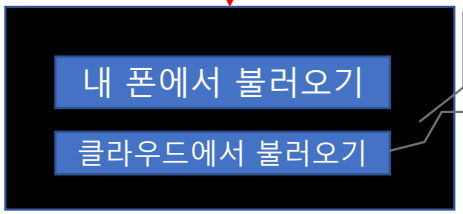
Voice on/off

Discoonect

Video on/off



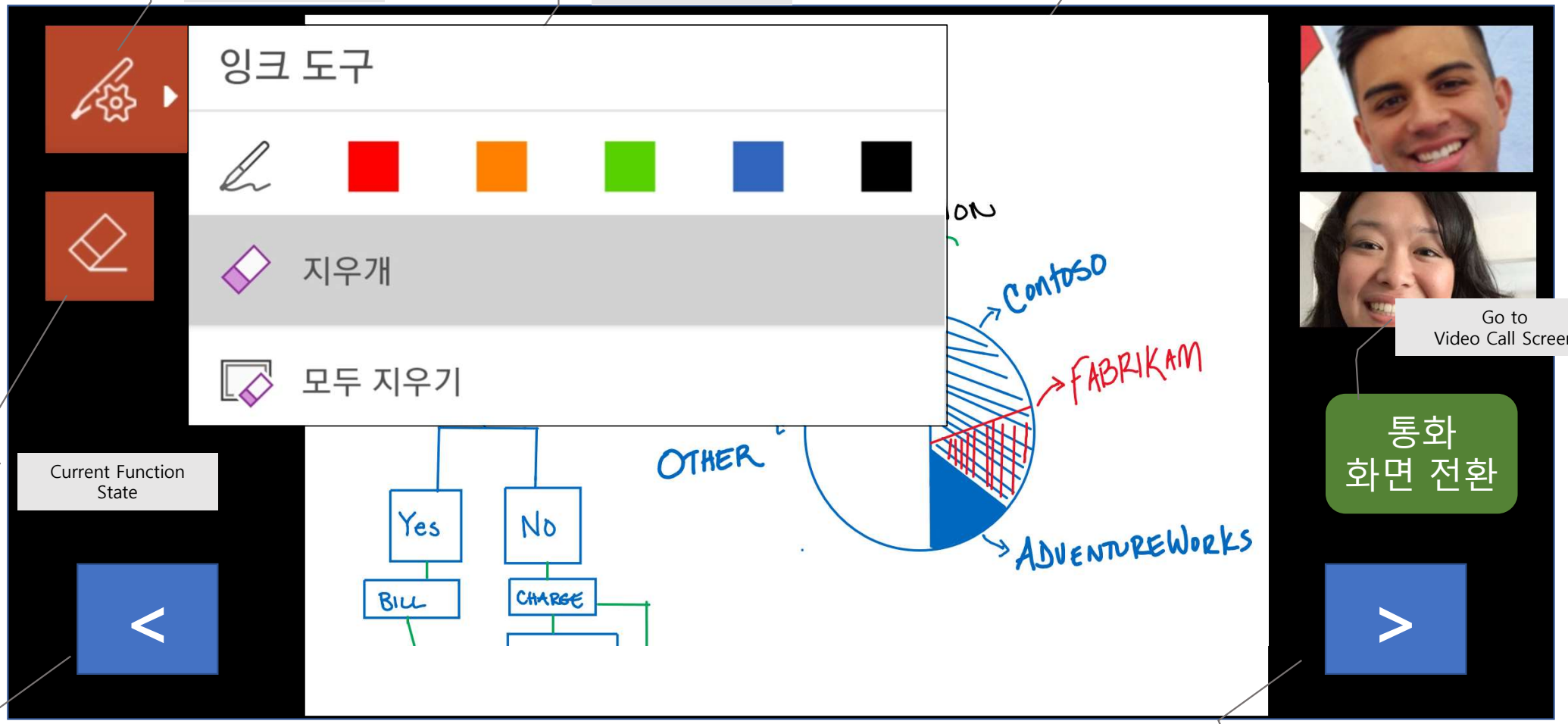
Whiteboard Scenario page



File Manager

Static Json API
(File path list)

Nurse App Screen Whiteboard Scenario



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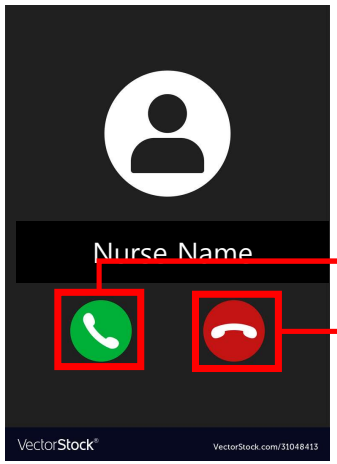
Customer App Screen Scenario



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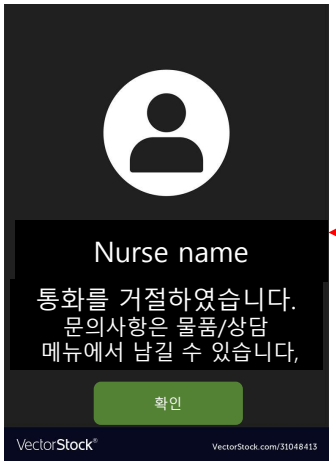

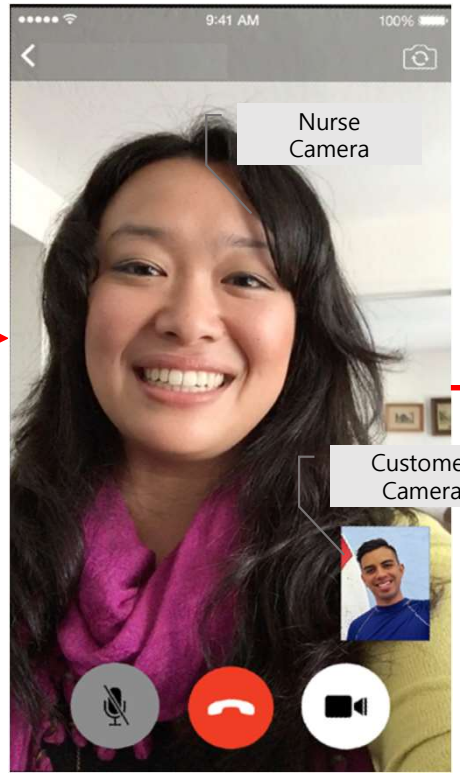

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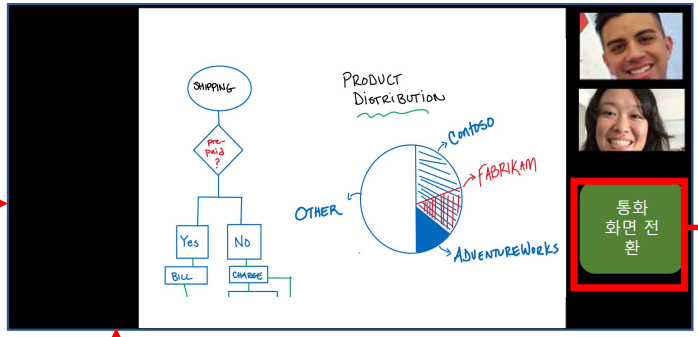

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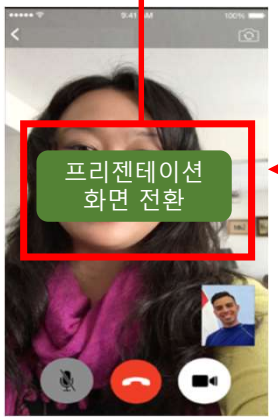
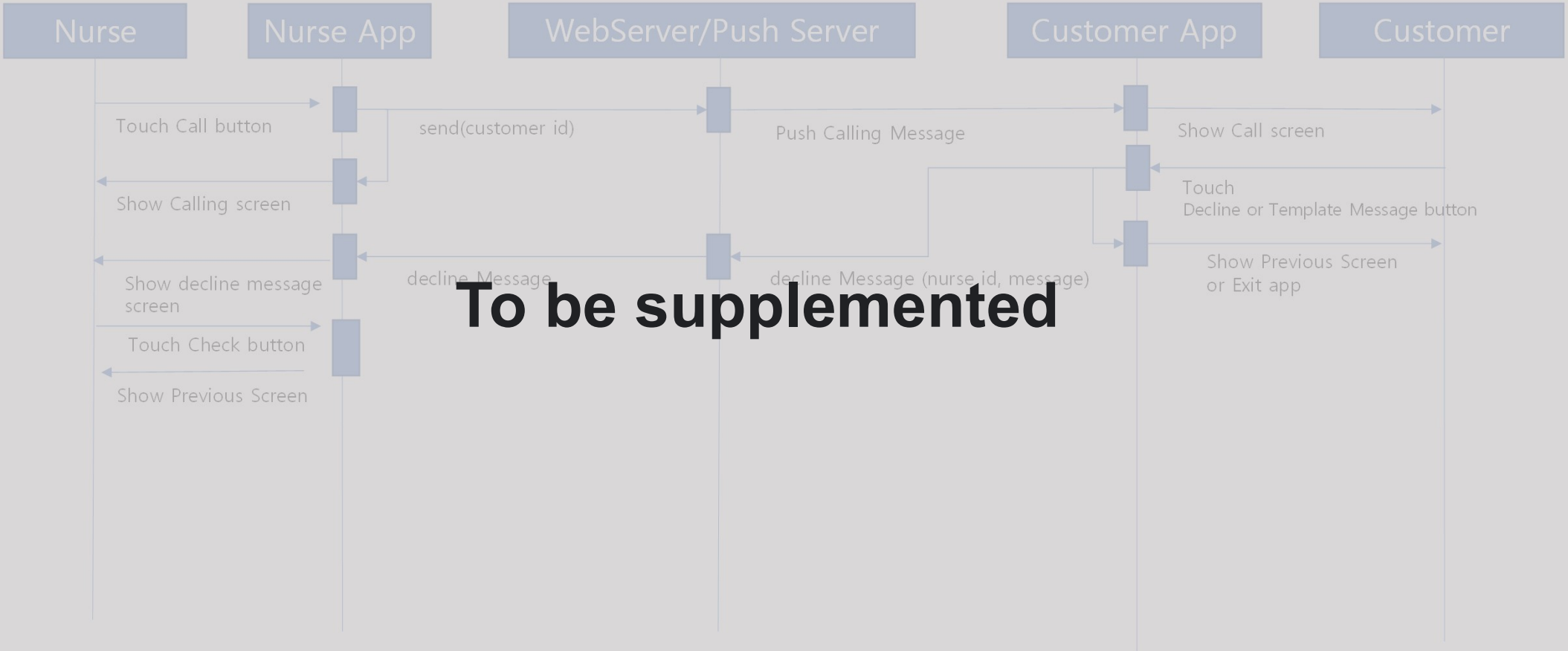


Video Call Screen

decline message screen

Sequence diagram – Calling & decline



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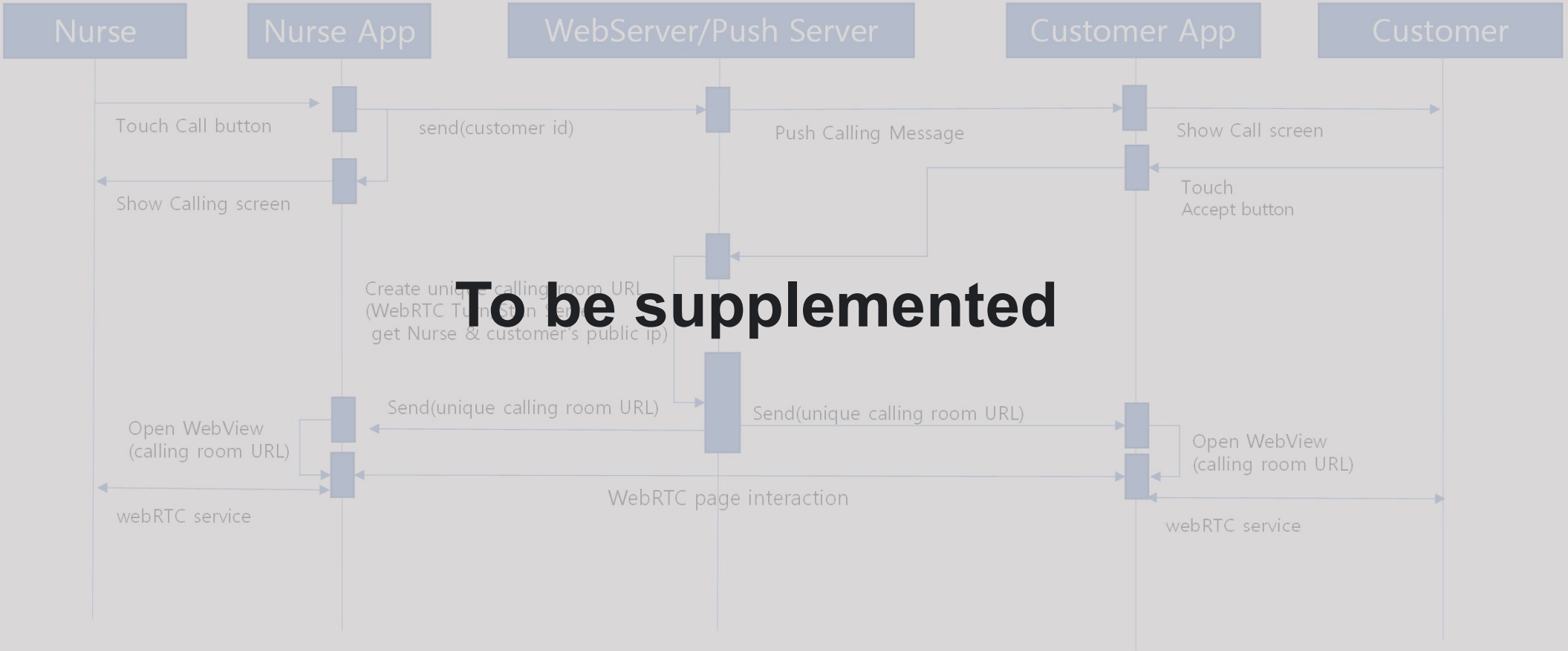

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