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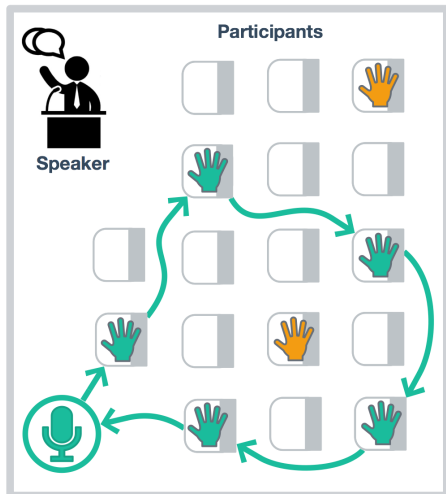
Smartphone-based Microphone: A Multi-User Service for Collaborative Work

The work is supported by the Ministry of Education and Science of Russia
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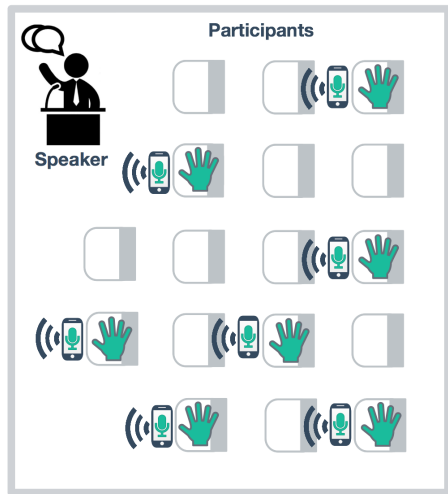
19th FRUCT Conference

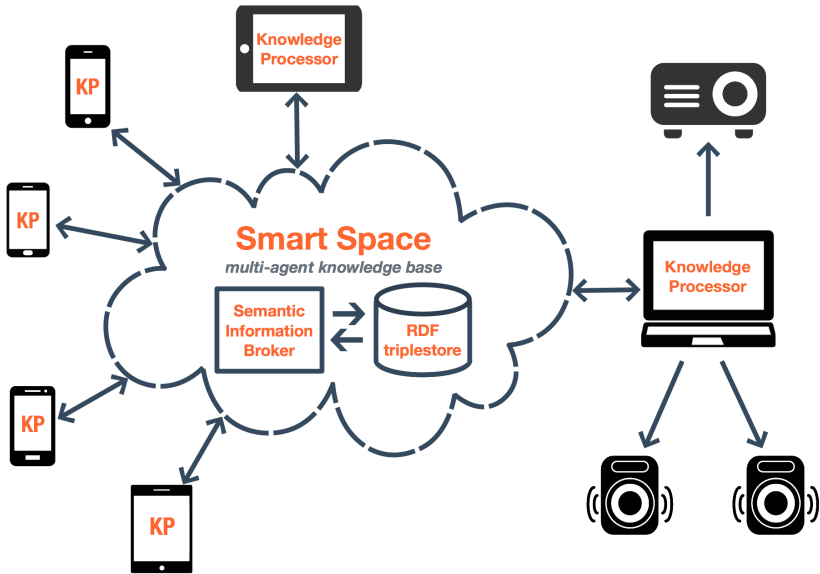
November 10, 2016, Jyvaskyla, Finland

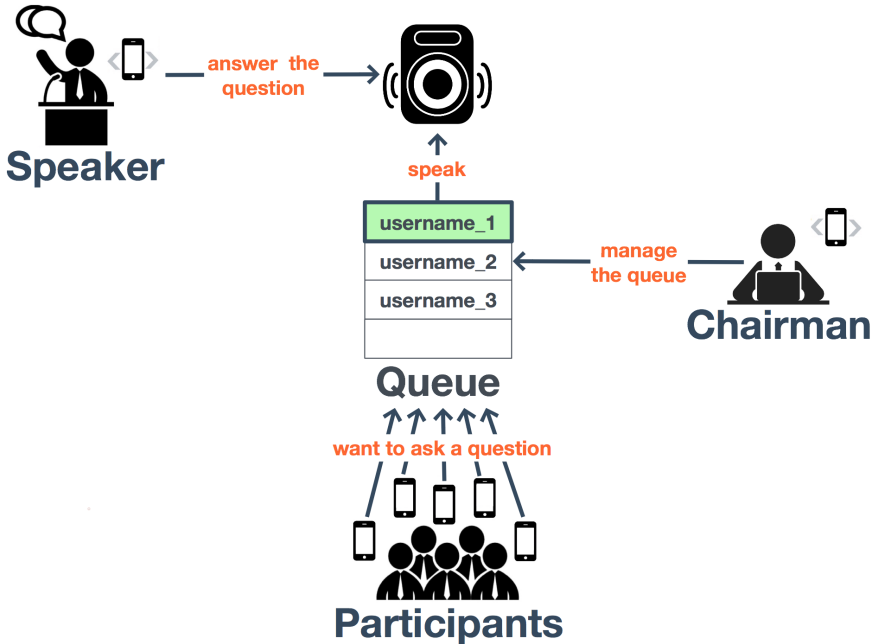
The usual way



With Microphone-Service







CLIENT

INSERT REQUEST INDIVIDUAL
username = user_1
position = null

SUBSCRIPTION ON QUEUE HEAD CLASS

GET QUEUE HEAD INDIVIDUAL
IF ((username = head_username) &
(isBusy=TRUE))

USE MICROPHONE-SERVICE

REMOVE REQUEST INDIVIDUAL
isBusy = FALSE

Request

position username

xsd:string

xsd:string

QueueHead

head_username isBusy

xsd:string

xsd:string

SERVER

INIT QUEUE HEAD INDIVIDUAL
head_username = null
isBusy = FALSE

SUBSCRIPTION ON REQUEST CLASS

ACTION_INSERT

GET REQUEST INDIVIDUAL
username = user_1
position = null

UPDATE REQUEST INDIVIDUAL
position = 1

FIND REQUEST INDIVIDUAL
WITH MIN POSITION

UPDATE QUEUE HEAD INDIVIDUAL
head_username = user_1
isBusy = TRUE

ACTION_REMOVE

GET REQUEST INDIVIDUAL
IF (username = head_username)
THEN isBusy=FALSE

IF (isBusy=FALSE)

SIB