WAJEHNI:

NINDOOR POSITIONING APPLICATION

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INTRODUCTION

Many technologies have emerged to keep pace with technological advances, including AR. Due to rare utilizing of AR tools, this project provides an application in the Arabic language to facilitate the process of navigating places inside UQU Al-Zaher branch, guiding people in an indoor environment using AR.

OBJECTIVES

- Using augmented reality to support the indoor navigation system in the application, giving users a good experience to navigate indoors by seeing their surroundings.
- Guiding the new students and staff in the Umm al-Qura University female branch.
- Finding the shortest path to the required destination on the campus.
- Save time, effort and reduce stress.

METHODOLOGY

The waterfall methodology had been used to develop this project.



HOW APP WORKS



start inside

building







open app

mobile receive Bluetooth signals







reach destination

start navigation

select place from menu

FUTURE WORKS

- Cover all buildings in the Al-Zaher branch.
- Add new services that support needs of the blind and the disabled people to move comfortably between buildings.

RESULTS





Support Arabic language.

Provide navigation system for users inside building.



Support access through menu for search service.

provide other path to navigate



Support the feedback service.

- Make the app as comprehensive as possible to support Saudi Arabia's Vision 2030 to facilitate mobility within other utilities.
- Extend to cover other branches of Umm-AlQura University.
- Add social contact with friends.
- Explore friends' locations by displaying a visual map.

CONCLUSION

Wajehni application is developed for enhancing AR technology in positioning fields by using beacon devices and various tools, For this purpose, we seize the opportunity to offer an official application of Umm AlQura University by developing a friendly interface such services without wasting time and effort.

ANIMATED MONTAGE

