Imam Mohammad ibn Saud Islamic University

College of Computer and Information Sciences

Information Systems Department

An Application for Mosque Video and Audio Broadcasting

By:

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Supervised by:

Dr. Waeal J.Obidallah

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Supervisor Name	Dr. Waeal J.Obidallah
Date	
Signature	

Declaration

We Abdulaziz Almanna, Ahmad Faqihi, and Abdulaziz Alshehri being members of final year project group number 3, declare that this report contains only work completed by members of our group except for information obtained in a legitimate way from literature, company, or university sources. All information from these other sources has been duly referenced and acknowledged in accordance with the University Policy on Plagiarism.

Furthermore, we declare that in completing the project, the individual group members had the following responsibilities and contributed in the following proportions to the final outcomes of the project:

Student ID	Responsibilities	Contribution %	Signature
439016991	All chapters	33.4%	
439013669	All chapters	33.3%	
429009345	All chapters	33.3%	

Acknowledgement

First and foremost, we pay our gratitude to the almighty ALLAH for giving us the ability to work hard and his greate help, strength and guidance through this project and our entire life.

We also want to express our greate thancks for our Supervisor Dr.Waeal J.Obaiallah who guided us in doing these projects. He provided us with invaluable advice and helped us in difficult periods. His motivation and help contributed tremendously to the successful completion of the project.

Besides, we would like to thank all Projects Committee doctors who helped us by giving us advice and providing the file and guidelines which we needed.

Also we would like to thank our families and friends for their support. Without that support we couldn't have succeeded in completing this project.

Abstract

After the announcement and decision of the Saudi Ministry of Islamic Affairs Dawah and Guidance that stated that loudspeakers on mosques should be switched off, some worshipers faced problems in tracking prayers and sermons, and they did not know the end of the prayer. The decision also affected some women who used to hear prayers and sermons. We work on this project to make alternative solutions for users to watch live broadcasts for prayer and sermons after choosing the mosque. The broadcast starts and ends automatically with motion detection.

Abstract (in Arabic)

بعد قرار وزارة الشؤون الإسلامية والدعوة والإرشاد في المملكة العربية السعودية الذي نص على إغلاق مكبرات الصوت في المساجد وقت الصلاة. واجه بعض المصلين مشاكل في تتبع الصلوات والخطب مما أدى الى عدم معرفتهم بانتهائها، وكما أثر القرار على بعض النساء اللواتي اعتدن على سماع الصلاة والخطب , نعمل في هذا المشروع على أن يكون هناك وسيلة بديلة تضمن للمستخدمين مشاهدة بث مباشر للصلاة والخطب بعد اختيارهم للمسجد, يبدا البث وينتهي تلقائيا بواسطة مستشعر الحركة .

Keywords

Mobile Application, Audio Broadcasting, Location-Based, Motion Detection, Real-Time video, Imam, Worshippers.

List of Abbreviations

WBS: Work Breakdown Structure.

SDLC: Software Development Life Cycle.

BPMN: Business Process Model and Notation.

App: Application

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Chapter 1: Planning

1.0 Introduction

We will present the project concepts and requirements throughout the planning phase. We can achieve this by stating and discussing the project's overview, the problem that our project will solve, its impact, stakeholders and their tasks, project objectives, methodology, scope statement, timeline, and tasks using Gantt chart explained responsibilities of the project team.

1.1 Project Overview

Considering the importance of prayer in the Muslim world, which is the second pillar of Islam and is held every days five times. People used to hear prayer through loudspeakers for going to the mosque.

That is why we came up with the idea of An Application for Mosque Video and Audio Broadcasting. It is an Android application that makes up for loudspeakers and prayer audio, and it is also possible to hear sermons. It also allows users to see the mosque's needs. We also have prayer times that allow worshippers to know the time of Adan. Our application consists of three interfaces users interface and two admin interfaces.

1.2 Problem Statement

The Saudi Ministry of Islamic Affairs made a decision which was as follows: Limiting the use of external loudspeakers to raise the call to prayer and iqama only. Furthermore, the loudness level of the devices does not exceed one-third of the degree of the loudspeaker device.

The worshipers could not keep track of prayer time and because hearing the sound of prayer was the most viable way to know that the prayer time had started and the prayer at which point. This was the reason for worshipers being delayed in the prayer. For some worshipers, not only were they late, but they also missed the prayer.

This decision does not just affect worshipers who cannot keep track of the prays times, and progress. It also affects females and people who have excuses to pass the praying in mosques Because they are used to hearing the prayer sounds from their home by loudspeaker because it brings reassurance to them.

1.3 Project Impact

1.3.1 Local impact

This project will benefit worshipers who have a problem with keeping track of prayer time. It strengthens them to perform the prayer on time and the people who longed to hear the sound of prayer. The project will enable them to hear what they were used to.

1.3.2 Global impact

There is no global impact.

1.4 Project Stakeholders

1.4.1 Admin

- Manage and change all information.
- Fix app's minor problems.
- Delete account.
- Handle reports.

1.4.2 Mosque admin

- Add new mosque information.
- Update mosque needs.

1.4.3 User

- Choose mosque.
- Join mosques broadcast.
- View mosques information and needs.
- Report a problem.

1.5 Objectives

- To help worshipers to keep track of prayer time and progress.
- To broadcast prayer sounds for females and elderly people.
- To inform the doers of good about the shortcomings of the mosque.
- To approximate benefactors to needy mosques location.

1.6 Approach

For our project we'll follow SDLC method. and use waterfall model methodology because we are working on the project in two semesters. In GP1 we only have two phases which are planning and analysis. In waterfall model phases are processed sequentially which is consistent with our project. As shown in the figures and tables below.

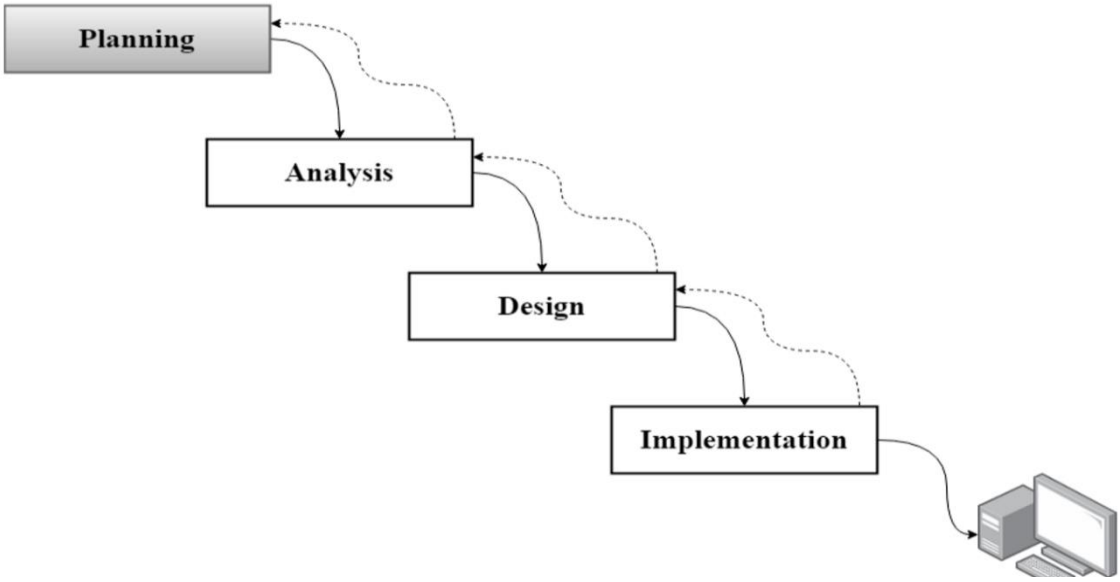


Figure 1: Planning phase

Phase Name	Planning
Definition	The planning phase is the first step in identifying why an information system needs to be constructed and how the project team will go about doing so [1].
Deliverables	• Project overview • Problem statement • Project impact • Project stakeholders • Objectives • Approach • Project scope • WBS • Gantt chart • Team's members responsibilities

Table 1: Planning phase

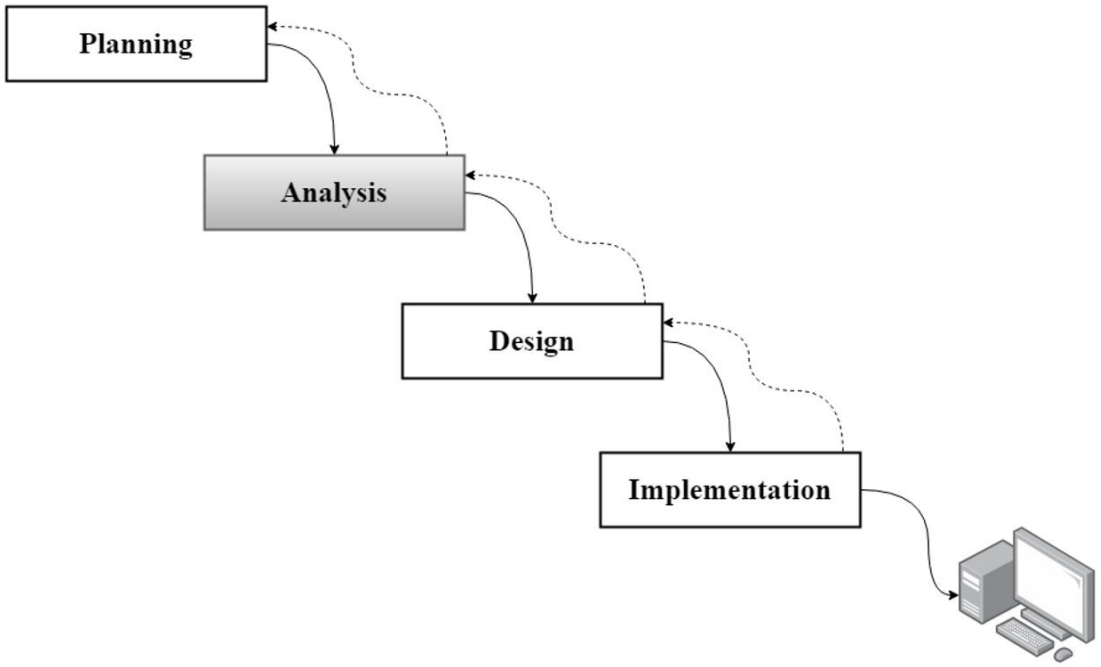


Figure 2: Analysis phase

Phase Name	Analysis
Definition	Who will use the system, what will it do, and where and when will it be used are all answered during the analysis phase [1].
Deliverables	• Possible Solutions • Overview of Existing systems • Existing Business Processes • Requirement Gathering Summary Results • Business Requirements • Proposed Business Process • Functional Requirements • Non-functional Requirements

Table 2: Analysis phase

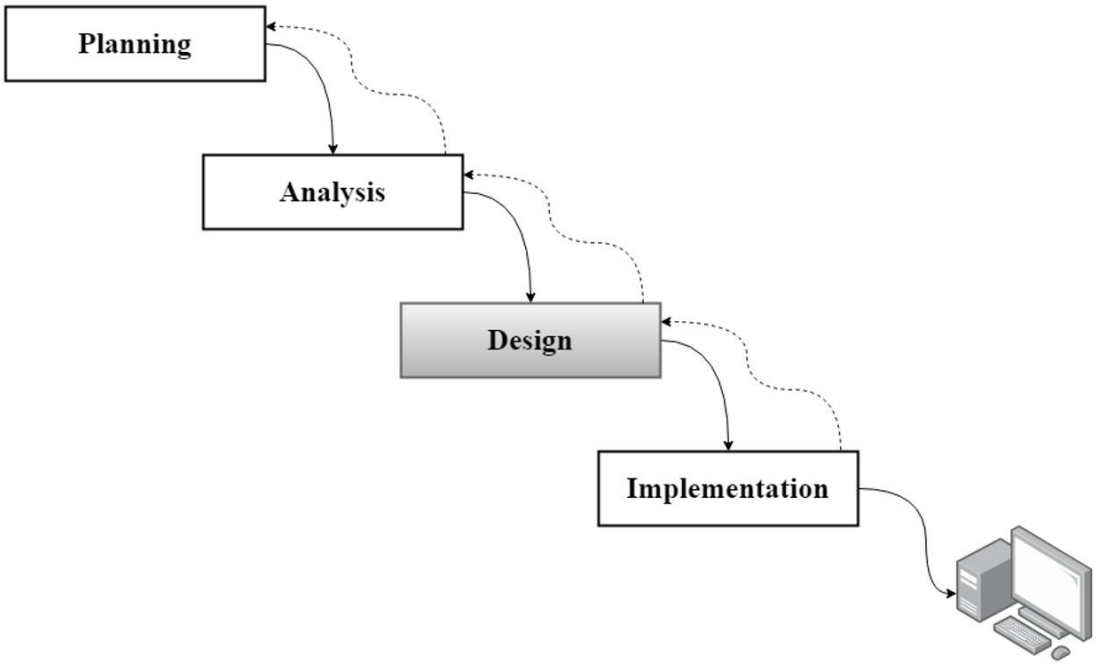


Figure 3: Design phase

Phase Name	Design
Definition	The design phase determines the system's hardware, software, and network architecture, as well as the user interface, forms, and reports, as well as the individual programs, databases, and files required [1].
Deliverables	• System modeling • Data modeling • Detailed interface design

Table 3: Design phase

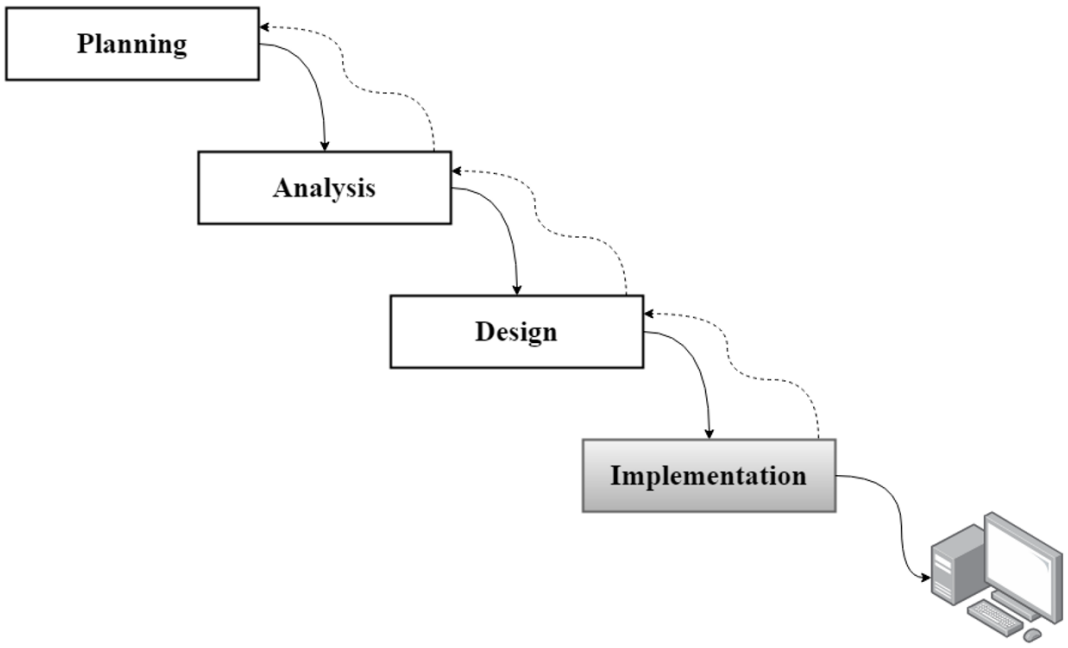


Figure 4: Implementation phase

Phase Name	Implementation
Definition	The period during which the system is actually created is known as the implementation phase (or purchased, in the case of a packaged software design). The implementation phase receives the most attention because it is the most time-consuming and expensive portion of the development process for most systems [1].
Deliverables	• System Specification • System Testing • System Deployment

Table 4: Implementation phase

1.7 Project Scope

The main scope of the project is to make an app that broadcasts the prayer and their are some functionalities that we intend to it to be in our app

The app includes the following functionalities:

- Convenient user interface and simple navigation.
- Flexibility.
- Mosques search options.
- Good image resolution.
- Good notifications posting management.
- High performance.
- Good security.
- Start and end broadcast automatically with AI programing.
- Broadcasts prayer to users.

1.8 Work Breakdown Structure

Work Breakdown Structure (WBS) is a deliverable-oriented grouping of the work involved in a project that defines the total scope of the project [2]. In our project, we have five main phases. Each phase has many tasks, as shown in Figure 5.

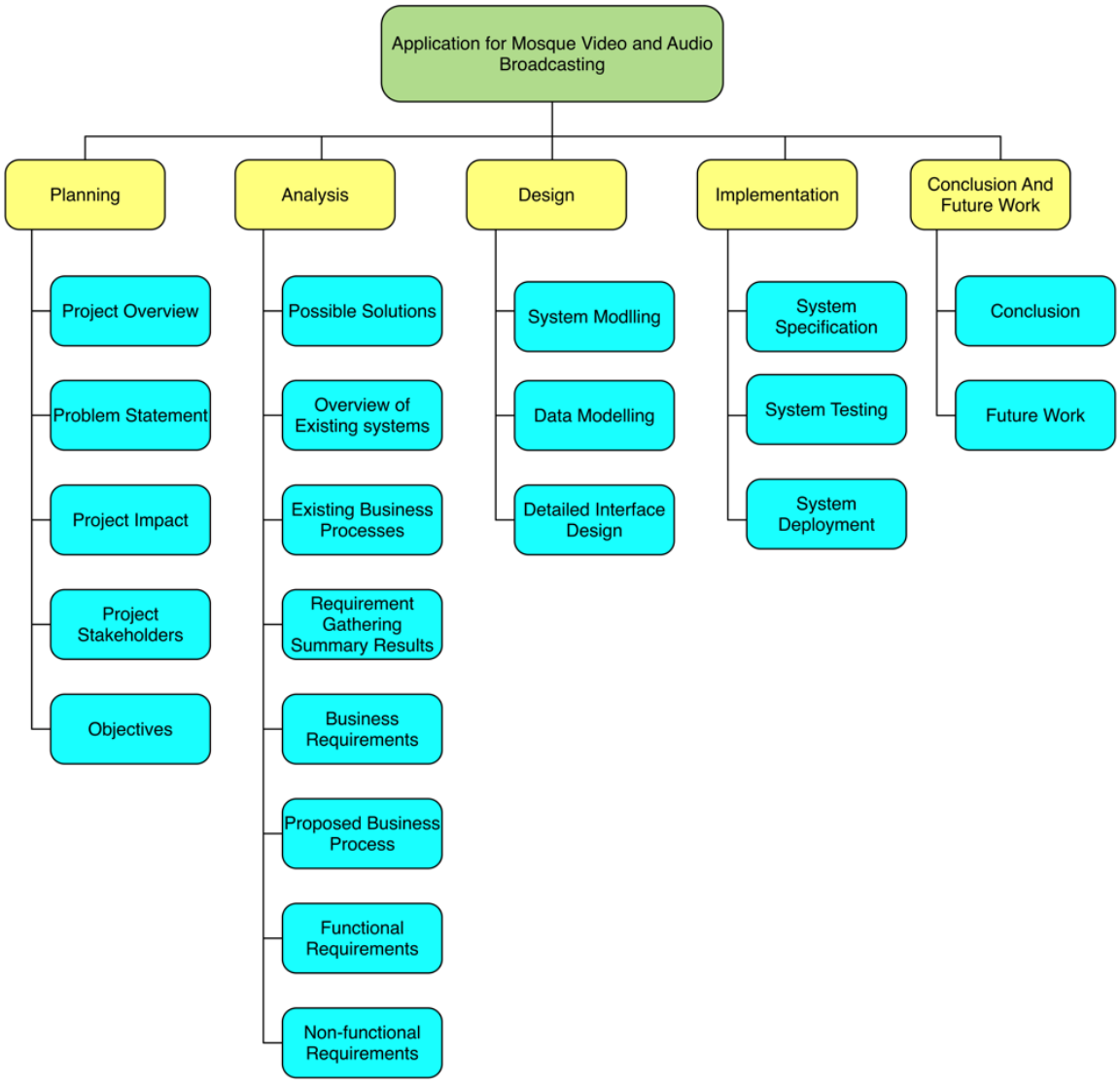
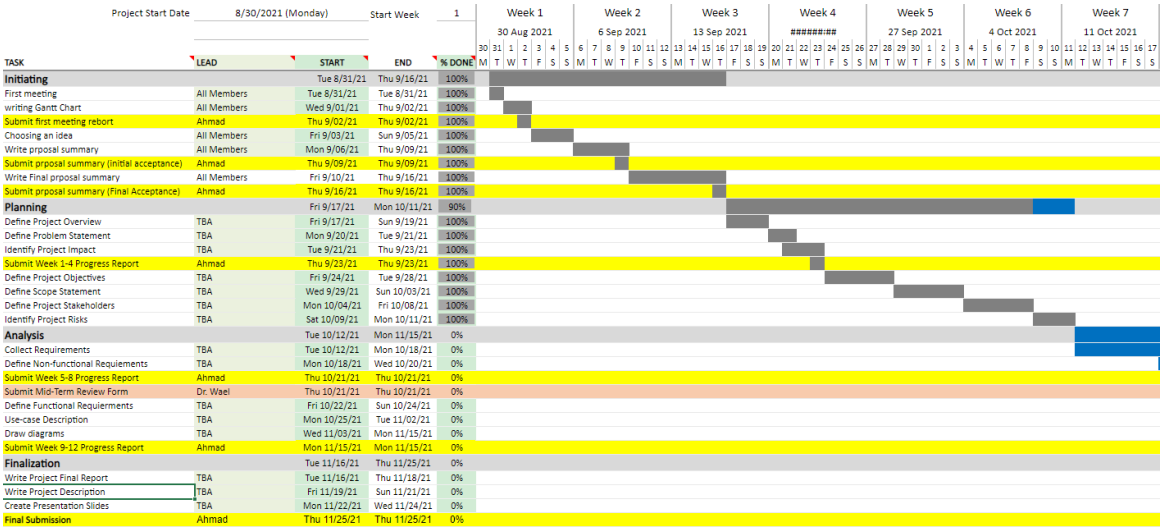


Figure 5: WBS

1.9 Gantt Chart (Time Frame)

Gantt Charts list tasks and provide progress bars that show where a task is in the process of being completed. It is a solid visual tool for project management that is simple to understand and create [3]. We used this tool to keep track of the project timeline and progress efficiently. The Gantt chart we created for our project is shown in Figure 6 and Figure 7 below.



Project Start Date: 8/30/2021 (Monday) — Start Week: 1

TASK	LEAD	START	END	% DONE
Initiating		Tue 8/31/21	Thu 9/16/21	100%
First meeting	All Members	Tue 8/31/21	Tue 8/31/21	100%
writing Gantt Chart	All Members	Wed 9/01/21	Thu 9/02/21	100%
Submit first meeting rebort	Ahmad	Thu 9/02/21	Thu 9/02/21	100%
Choosing an idea	All Members	Fri 9/03/21	Sun 9/05/21	100%
Write prposal summary	All Members	Mon 9/06/21	Thu 9/09/21	100%
Submit proposal summary (initial acceptance)	Ahmad	Thu 9/09/21	Thu 9/09/21	100%
Write Final proposal summary	All Members	Fri 9/10/21	Thu 9/16/21	100%
Submit proposal summary (Final Acceptance)	Ahmad	Thu 9/16/21	Thu 9/16/21	100%
Planning		Fri 9/17/21	Mon 10/11/21	90%
Define Project Overview	TBA	Fri 9/17/21	Sun 9/19/21	100%
Define Problem Statement	TBA	Mon 9/20/21	Tue 9/21/21	100%
Identify Project Impact	TBA	Tue 9/21/21	Thu 9/23/21	100%
Submit Week 1-4 Progress Report	Ahmad	Thu 9/23/21	Thu 9/23/21	100%
Define Project Objectives	TBA	Fri 9/24/21	Tue 9/28/21	100%
Define Scope Statement	TBA	Wed 9/29/21	Sun 10/03/21	100%
Define Project Stakeholders	TBA	Mon 10/04/21	Fri 10/08/21	100%
Identify Project Risks	TBA	Sat 10/09/21	Mon 10/11/21	100%
Analysis		Tue 10/12/21	Mon 11/15/21	0%
Collect Requirements	TBA	Tue 10/12/21	Mon 10/18/21	0%
Define Non-functional Requiements	TBA	Mon 10/18/21	Wed 10/20/21	0%
Submit Week 5-8 Progress Report	Ahmad	Thu 10/21/21	Thu 10/21/21	0%
Submit Mid-Term Review Form	Dr. Wael	Thu 10/21/21	Thu 10/21/21	0%
Define Functional Requierments	TBA	Fri 10/22/21	Sun 10/24/21	0%
Use-case Description	TBA	Mon 10/25/21	Tue 11/02/21	0%
Draw diagrams	TBA	Wed 11/03/21	Mon 11/15/21	0%
Submit Week 9-12 Progress Report	Ahmad	Mon 11/15/21	Mon 11/15/21	0%
Finalization		Tue 11/16/21	Thu 11/25/21	0%
Write Project Final Report	TBA	Tue 11/16/21	Thu 11/18/21	0%
Write Project Description	TBA	Fri 11/19/21	Sun 11/21/21	0%
Create Presentation Slides	TBA	Mon 11/22/21	Wed 11/24/21	0%
Final Submission	Ahmad	Thu 11/25/21	Thu 11/25/21	0%

Figure 6: Gantt chart week 1-7

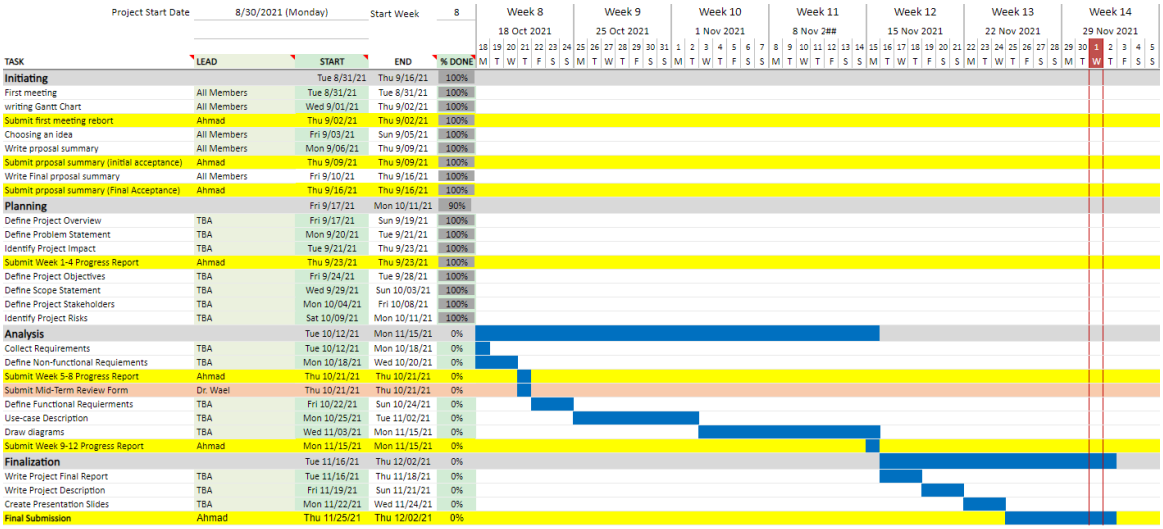


Figure 7: Gantt chart week 8-14

1.10 Team Member's Responsibilities

The Project's team consists of three members in most of the tasks we work together, but for some tasks, the work is done individually, so Table 5 and Table 6 show the tasks and who is responsible for each one.

Responsibilities	Shortcut
Teamwork	TW
Responsible	R
Involved	I
Consultant	C
Participated	P

Table 5: Responsibilities shortcut

Task	Task Description	Ahmad	Aziz-Almanna	Aziz-Alshehri
Chapter 1		TW		
1.1	Project overview		R	

1.2	Problem statement	R		
1.3	Project impact	R		
1.4	Project stakeholders	R	I	
1.5	Objectives	R		
1.6	Approach		R	
1.7	Project scope	R		
1.8	WBS			R
1.9	Gantt chart	TW		
1.10	Team's member's responsibility	R		
Chapter 2		TW		
2.1	Possible Solutions			R
2.2	Overview of Existing systems	R		
2.3	Existing Business Processes		R	
Chapter 3		TW		
3.1	Requirement Gathering Summary Results			
3.2	Business Requirements			
3.3	Proposed Business Process			
3.4	Functional Requirements			
3.5	Non-functional Requirements			

Table 6: Team members responsibilities

1.11 Conclusion

We gave an idea for our project by stating the project plan, the approach we utilized (waterfall model), the tasks for each phase represented in tables and figures, and the project team's responsibilities represented in a table.

In the next chapter, we will represent the background analysis.

Chapter 2: Background Analysis

2.0 Introduction

This chapter will discuss livestreaming and video podcasting and which one we will use, as well as a nearly identical system to our project and the BPMN (As-Is) for that system.

2.1 Possible Solutions

Our project has possible solutions for broadcasting the prayer live, which is the main point to keep the worshipers tracking the prayer. The possible solutions are to use livestreaming which is the method of broadcasting video content to viewers while being filmed in real-time without recording the broadcast or to use video podcasting which has the same functionality as livestreaming plus recording the broadcast. Either way to show the broadcast all you need is a device that can connect to the internet such as a smartphone or tablet. In our view prayer is a temporary event once the prayer is over we do not need the prayer videos. It will be costly to record all the prayer videos.

	Cost	**Complexity**
Livestreaming	Low	Medium
Video podcasting	High	Medium

Table 7: Comparison between livestreaming and video podcasting

2.2 Overview of Existing systems

The systems that converging with our project almost non-existent. But there is only one app that has the same concept. called Masjidna Live It has a lot of positive aspects such as:

- Multi-language interface
- Map that shows the locations of mosques.

However, we found that it is have a lot of problems such as:

- Lacking in many parts
- User interface is difficult to use
- Certain features are not working
- The app is not effective.

As a result, we planned to get benefit from their system and learn from their mistakes and implement our own ideas.

(See Appendix A)

2.3 Existing Business Processes

The BPMN below shows how the existing process of masjidna live, The Imam starts broadcasting manually, the notice arrives for worshippers, If the worshippers enter the application the worshipper watches live Broadcast worshipper goes to mosque, if not the worshipper cannot see the live broadcast. You can see the figure 8.

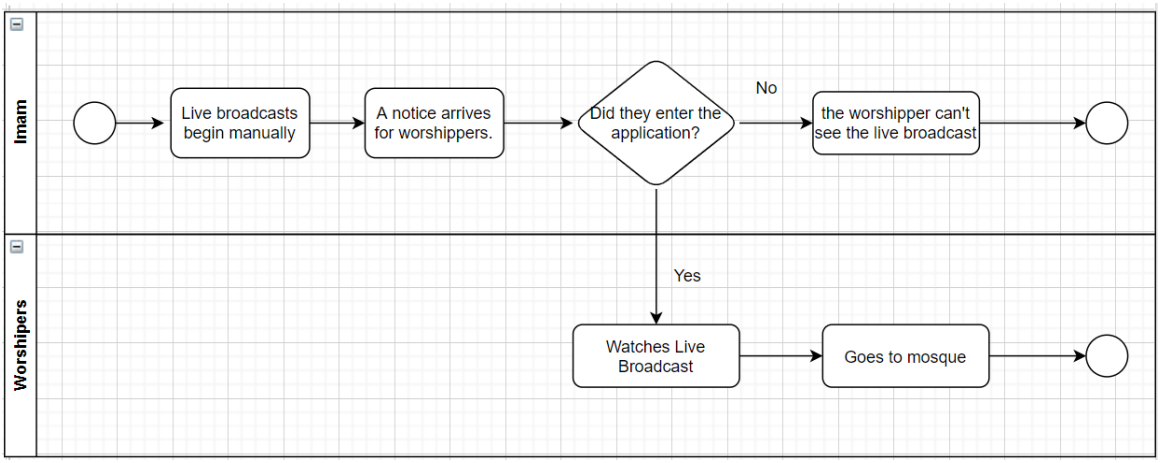


Figure 8: BPMN diagram (As-Is)

2.4 Conclusion

We discussed the differences between livestreaming and video podcasting, including why we selected livestreaming over video podcasting. We also discussed Masjedna Live app which is an app that has a similar concept to our project's idea. We listed the app's positive and negative aspects as well as the app's business prosses as shown in the figure.

Chapter 3: Requirements Analysis

3.0 Introduction

In this chapter, we will go over the techniques we used for gathering requirements and analysing it. We will also present BPMN (to-be) for our project. And we will show functional requirements represented in Use-Case diagrams and develop Use-Case descriptions table for each case. And the non-functional requirements that our system should meet.

3.1 Requirement Gathering Summary Results

3.1.1 Meeting with supervisor

Our weekly meetings with the project supervisor Dr.Waeal helped us have a better understanding of the project. He gave us serval notes and advice on our project. And we came up with a lot of requirements during those meetings.

3.1.2 Brainstorming

Brainstorming is a technique that is commonly used to collect a large number of ideas from a group of people. Typically, brainstorming is done to uncover potential answers to problems and to simplify the details.[4] All of the project members met several times to collect requirements, share information, and explore ways to improve the project ideas.

3.1.3 Questionnaire

The use of standardised survey questions can be a simple and effective way to investigate research concerns and give triggers for difficult or contentious themes. Questionnaires that are well-designed and validated yield a wealth of information.[5]

We created Questionnaire by using google forms with 11 questions and we received 218 responses. We have made this Questionnaire to see people's opinions and to measure how much they accept the idea of the project.

And we conclude the following:

- Almost everyone who has responded has missed a prayer because they did not hear the prayer's sound.
- Large amount of responses to the questionnaire have a trouble in knowing that prayer time came in.
- 81 from 85 female responses want to hear Friday sermon in the app.
- Half of responseses did not want to save the broadcasts.
- This app not only appeals to males, but also to women, as seen by the 73 female responses that support the app's exitance.
- 85.8% of people think that having an app will help them keep praying.

(See Appendix B)

3.2 Business Requirements

3.2.1 User

- User should be able to register.
- User should be able to log in from any device.
- User should be able to choose mosque using map.
- User should be able to choose mosque by mosque’s name.
- User should be able to join broadcast if the prayer started.
- User should be able to see prayer status if the prayer doesn’t start.
- User should be able to view mosque page.
- User should be able to report a problem.

3.2.2 Admin

- Admin should be able to log in.
- Admin should be able to manage app.
- Admin able to add mosque.
- Admin able to update mosque information.

3.2.3 Mosque admin

- Mosque admin should be able to log in.
- Mosque admin should be able to add mosque
- Mosque admin should be able to update mosque information

3.3 Proposed Business Process

The BPMN below shows how the process of our project. In the beginning the system is available all the time and the first prosses is determin the states of prayer, To determin the prayer status the system waits for the beginning of prayer, The system will detects the prayer, starts the broadcast, change the states of prayer and sends a notification to the user. The system will waits end of prayer, detects end of prayer, ends the broadcast and change the state of prayer.

After we know how to determine the state of prayer the user enters the app. The System will check the prayer status, If prayer status is started the user watch broadcast. If not the user see that the prayer dose not started yet. You can see the figure 9.

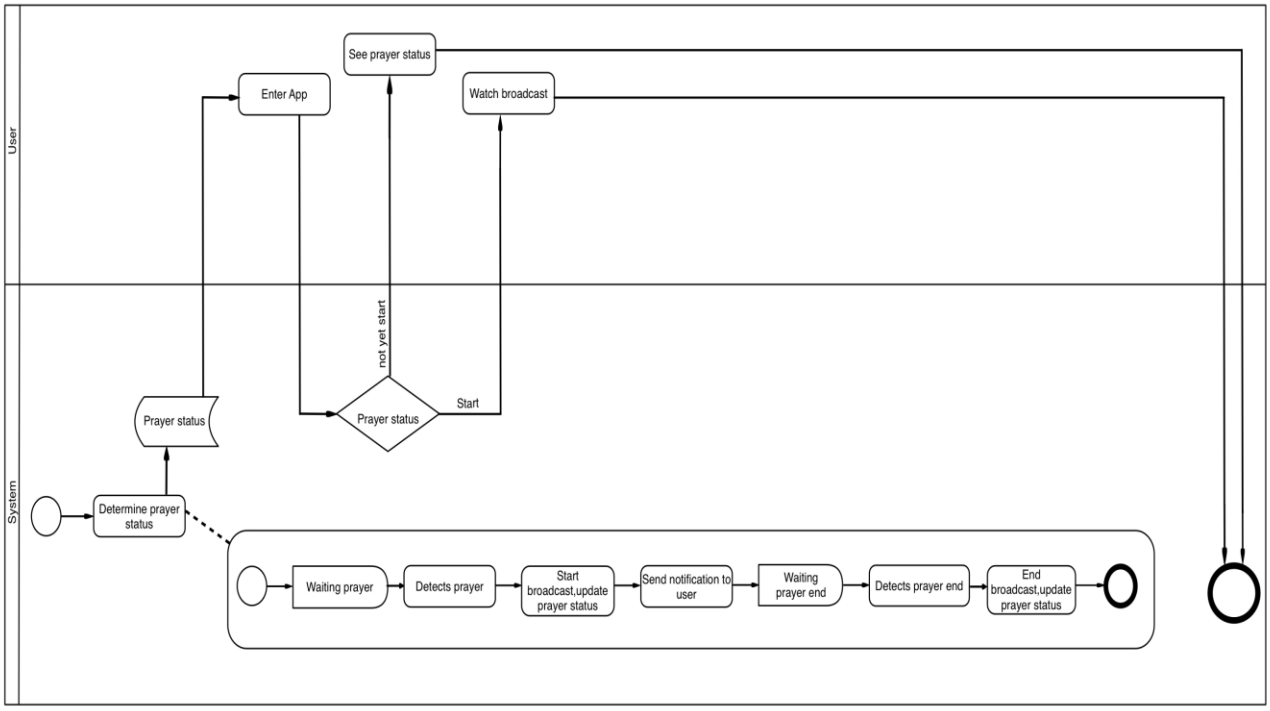


Figure 9: BPMN diagram (To-Be)

(go to Appendix C to see same diagram in Arabic)

3.4 Functional Requirements

3.4.1 Use-case diagrams

3.4.1.1 Admin use-case

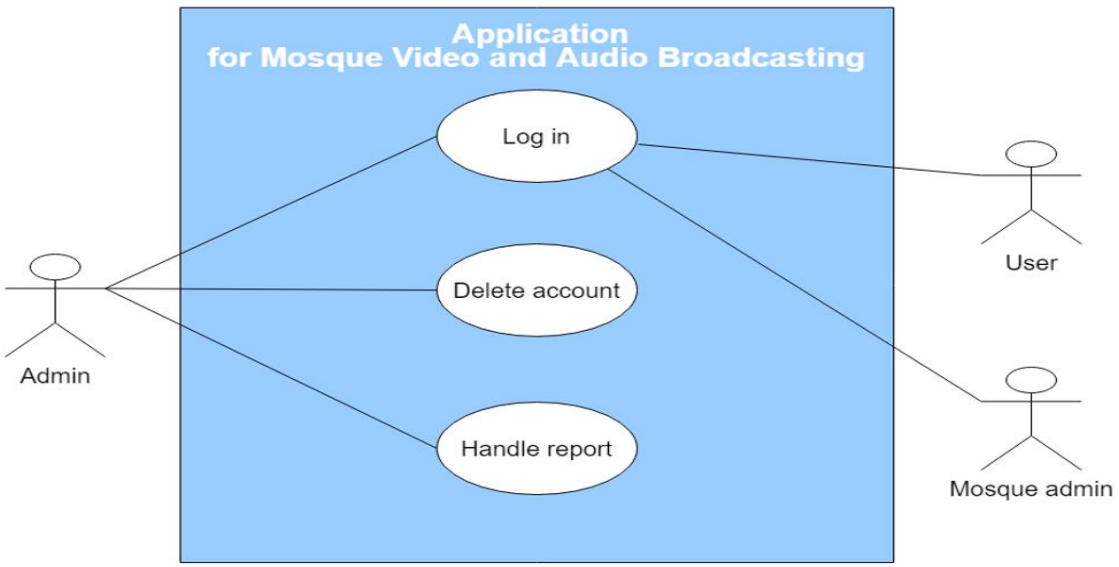


Figure 10: Admin use-case

3.4.1.2 Mosque admin use-case

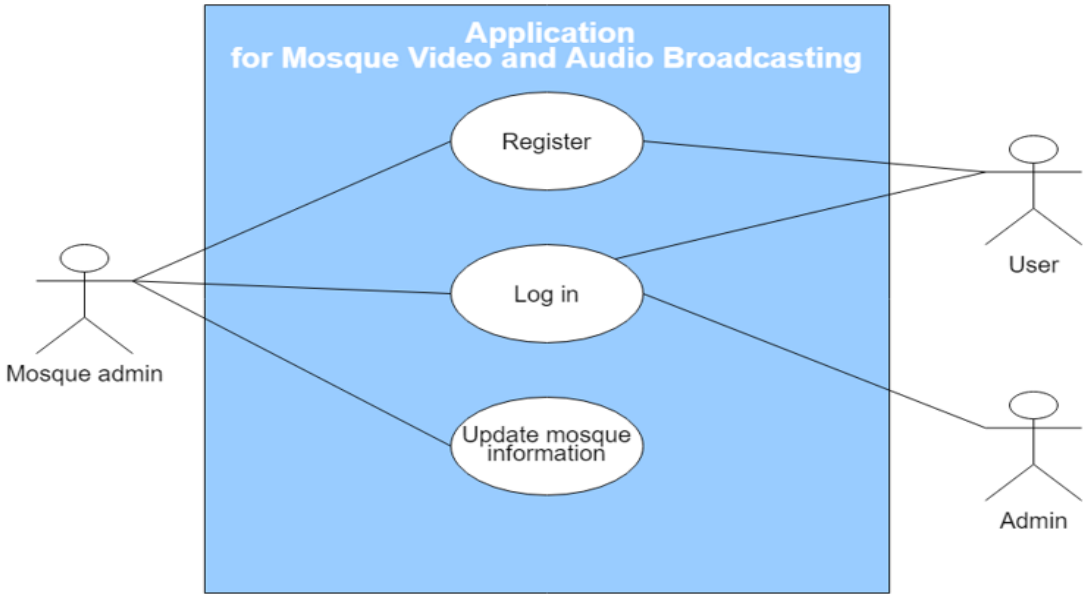


Figure 11: Mosque admin use-case

3.4.1.3 User use-case

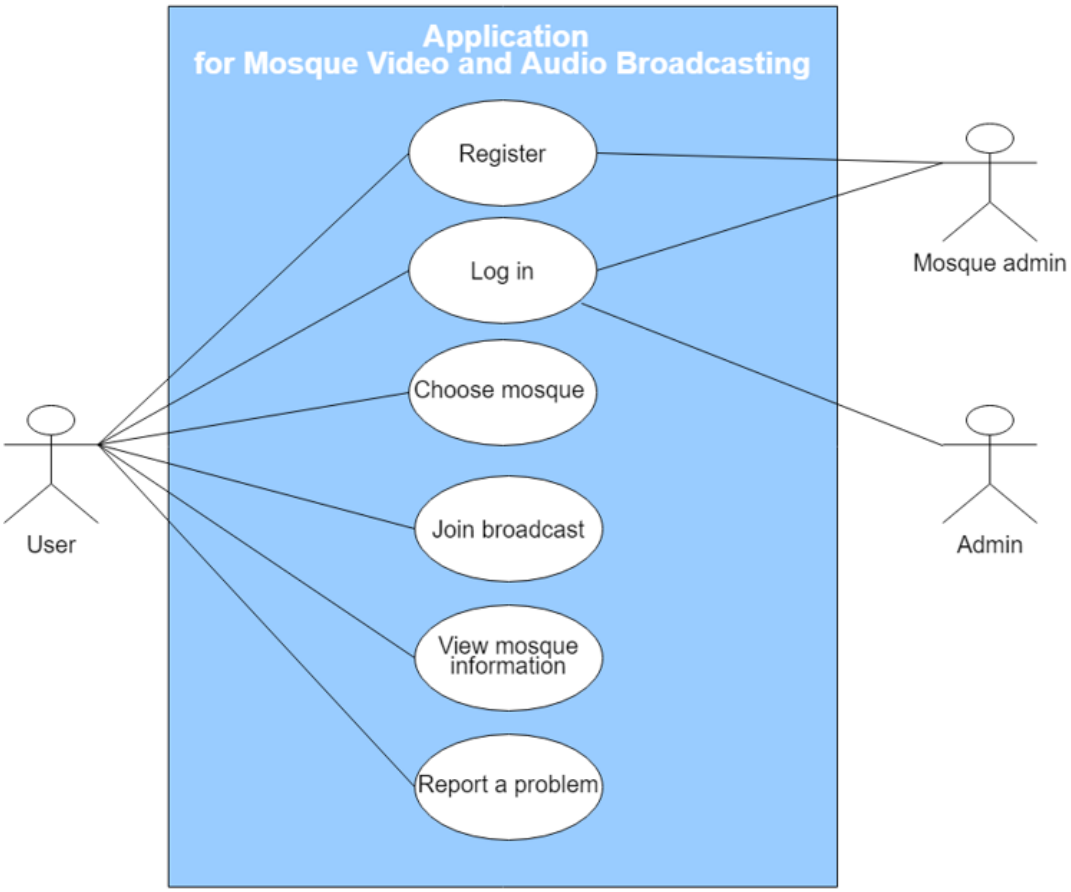


Figure 12: User use-case

3.4.2 Use-case deception

3.4.2.1 Register Use-Case description

Use Case: Register	**ID:** 100	**Important Level:** High
Primary Actors: User, mosque admin		
Brief Description: User and mosque admin required to register so the system can save user choices so he /her can enter from any device		
Preconditions: None		
Relationship: **Association :** User, Mosque admin **Include :** **Extend :** **Generalization :**		
Flow Of Event: 1 User/Mosque admin open the app 2 System displays register page 3 User/Mosque admin create an account 4 User/Mosque admin enter valid password 5 User/Mosque admin press register		
Postconditions: User/Mosque admin registered successfully. System displays home page		

Table 8: Register Use-Case description

3.4.2.2 Log in Use-Case description

Use Case: Login	**ID:** 200	**Important Level:** High
Actors: User, Admin, Mosque admin		
Brief Description: User required to log in so he/she can get access to his/her data		
Preconditions: User must sign up first.		
Relationship: **Association** **:** User, Admin. Mosque admin **Include** **:** **Extend** **:** **Generalization** **:**		
Flow Of Event: 1 User/Admin/Mosque admin open the app 2 User/Admin/Mosque admin choose to log in 3 System display log in page 4 User/Admin/Mosque admin enter correct information 5 System checks if the information are correct 6 System display User/Admin/Mosque admin main page		
Postconditions: Admin/User/Mosque admin log in successfully. System displays home page		

Table 9: Log in Use-Case description

3.4.2.3 Choose Mosque Use-Case description

Use Case: Choose Mosque	**ID:** 300	**Important Level:** High
Primary Actors: User		
Brief Description: The app has many mosques and each mosque have broadcasr so, User must choose a mosque to watch.		
Preconditions: User must log in to the system		
Relationship: **Association :** User **Include :** **Extend :** **Generalization :**		
Flow Of Event: 1 User Opens Mosque Map 2 System displays location of mosque 3 User chooses mosque 4 The system adopts the mosque for the user.		
Postconditions: The user has chosen mosque to watch the broadcast		

Table 10: Choose mosque Use-Case description

3.4.2.4 Join broadcast Use-Case description

Use Case: Join broadcast	**ID:** 400	**Important Level:** High
Primary Actors: User		
Brief Description: The whole idea of this project is to enable the user to watch a broadcast of prayer and to watch the broadcast you must join it firest.		
Preconditions: • User must choose a mosque first • Prayer status must be started		
Relationship: **Association :** User **Include :** **Extend :** **Generalization :**		
Flow Of Event: 1 User enter home page 2 User choose broadcast option 3 System displays the broadcast		
Postconditions: User able to watch the broadcast.		

Table 11: Join broadcast Use-Case description

3.4.2.5 View Mosque information Use-Case description

Use Case: View Mosque information	**ID:** 500	**Important Level:** Medium
Primary Actors: User		
Brief Description: User want to see mosque information to donate for mosque what it need.		
Preconditions: None		
Relationship: **Association** : User **Include** : **Extend** : **Generalization** :		
Flow Of Event: 1 User enter mosque list 2 System displays all of mosques 3 User choose mosque 4 System displays mosque page		
Postconditions: User view all mosque information		

Table 12: View Mosque information Use-Case description

3.4.2.6 Report problem Use-Case description

Use Case: Report problem	**ID:** 600	**Important Level:** High
Primary Actors: User		
Brief Description: User may have some issues with the system, in which case he can notify the admin.		
Preconditions: User must log in to the system		
Relationship: **Association** : User **Include** : Handel problem **Extend** : **Generalization** :		
Flow Of Event: 1 User enter home page 2 User choose report problem option 3 User write the problem		
Postconditions: The report send to admin.		

Table 13: Report problem Use-Case description

3.4.2.7 Handle report Use-Case description

Use Case: Handle report	**ID:** 700	**Important Level:** High
Primary Actors: Admin		
Brief Description: User may have some issues with the system, in which case he will report the problem and admin must solve it.		
Preconditions: Admin must log in to the system.		
Relationship: **Association** : Admin **Include** : **Extend** : **Generalization** :		
Flow Of Event: 1 Admin enter home page 2 Admin choose reports option 3 System displays report list 4 Admin choose unsolved report 5 Admin handle the report		
Postconditions: The report was dealt with.		

Table 14: Handle report Use-Case description

3.4.2.8 Update Mosque information Use-Case description

Use Case: Update Mosque information	**ID:** 800	**Important Level:** Medium
Primary Actors: Admin, Mosque admin		
Brief Description: Mosque information contain mosque needs and it unchangeable so, someone have to change it.		
Preconditions: Admin must log in to the system.		
Relationship: **Association** : Admin, Mosque admin **Include** : **Extend** : **Generalization** :		
Flow Of Event: 1 Mosque admin enter mosque list 2 System displays all of mosques 3 Mosque admin choose mosque 4 System displays mosque page 5 Admin/Mosque admin adjusts mosque information and needs		
Postconditions: Mosque information have been updated.		

Table 15: Update Mosque information Use-Case description

3.5 Non-functional Requirements

3.5.1 Availability

- The system should be available 24/7 Especially at the time of prayer.

3.5.2 Security

- The system should be secure to protect the application.

3.5.3 Efficiency

- The system should be efficient in the input/output process and how much can be processed at a time.

3.5.4 Supportability

- The system should support English and Arabic language.

3.5.5 Reliability

- The system should be reliable and do not fail under any circumstances.

3.5.6 Usability

- The system should be simple to use by anyone without instructions.

3.5.7 Scalability

- The system should be able to increase usage and process more data over time.

3.6 Conclusion

The requirements for our system were gathered using 3 techniques meeting with the supervisor, a brainstorming, and a questionnaire. We displayed the BPMN diagram and used four Use-Cases diagram and Use-Case Descriptions table for each case to define our functional requirements. And we listed non-functional requirements that our system must meet.

References

[1] A. Dennis, B. H.Wixom, and D. Tegarden, Systems analysis design, UML version 2.0 : an object oriented approach. 2012.

[2] K. Schwalbe, “Information Technology Project Management, Reprint,” INFORMATION TECHNOLOGY PROJECT MANAGEMENT, Fifth Edition, no. July, 2008.

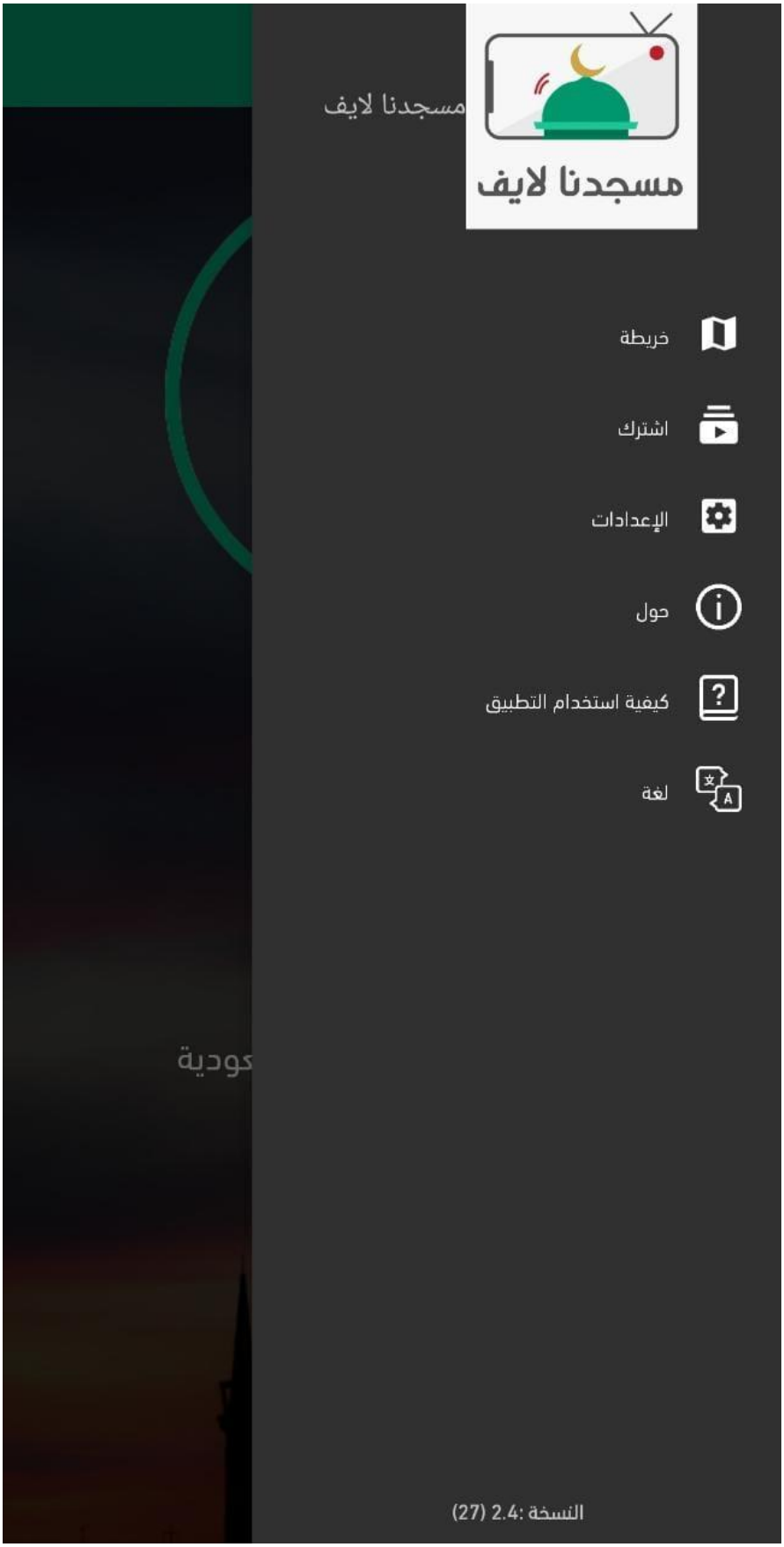
[3] “Effective Use of Gantt Chart for Managing Large Scale Projects - ProQuest.” https://www.proquest.com/docview/220442584?pq-origsite=gscholar&fromopenview=true (accessed Nov. 18, 2021).

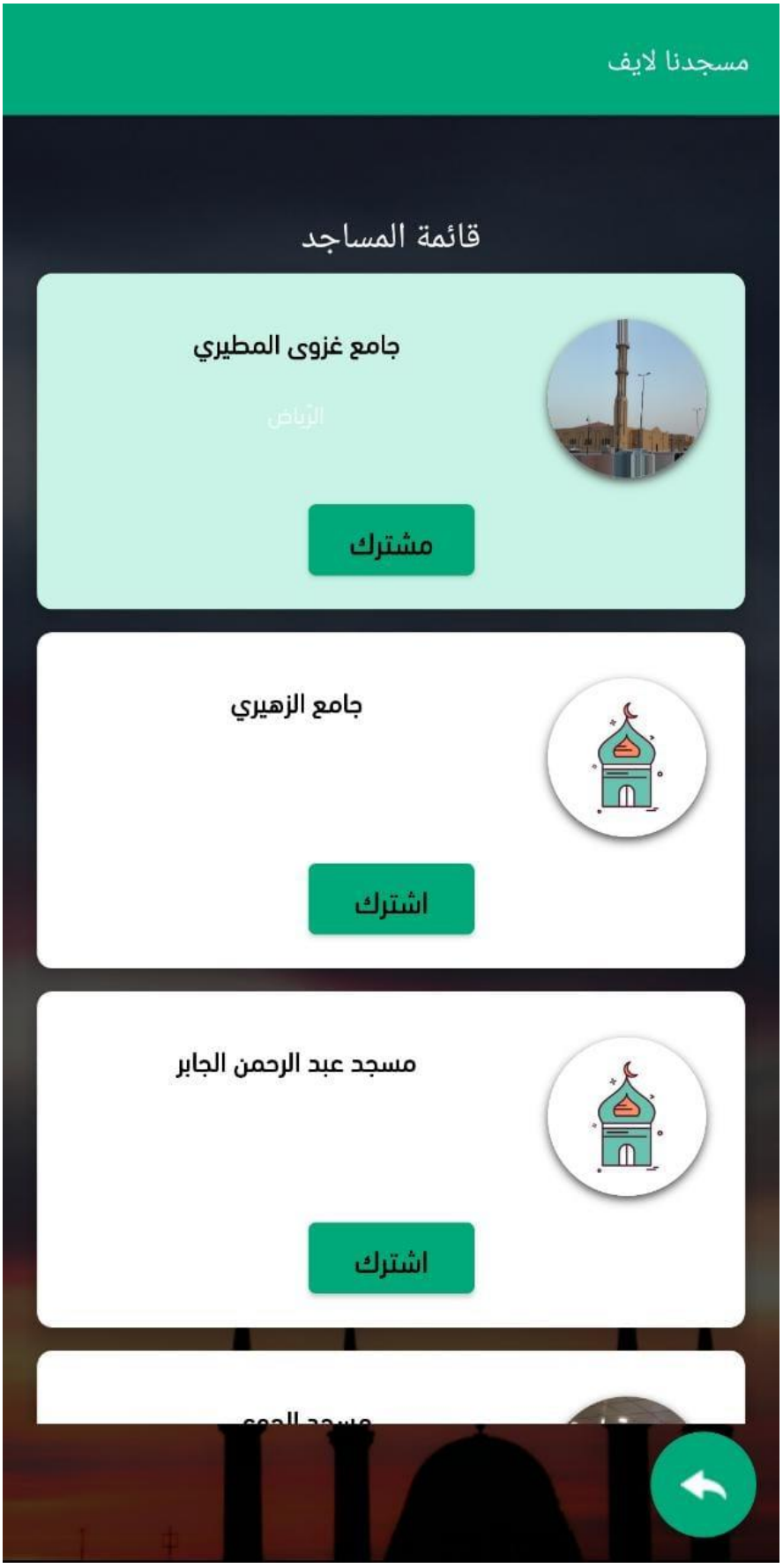
[4] M. Masters, “Using the Brainstorming Technique in Business Analysis > Business Analyst Community & Resources | Modern Analyst.” https://www.modernanalyst.com/Resources/Articles/tabid/115/ID/2067/Using-the-Brainstorming-Technique-in-Business-Analysis.aspx (accessed Nov. 20, 2021).

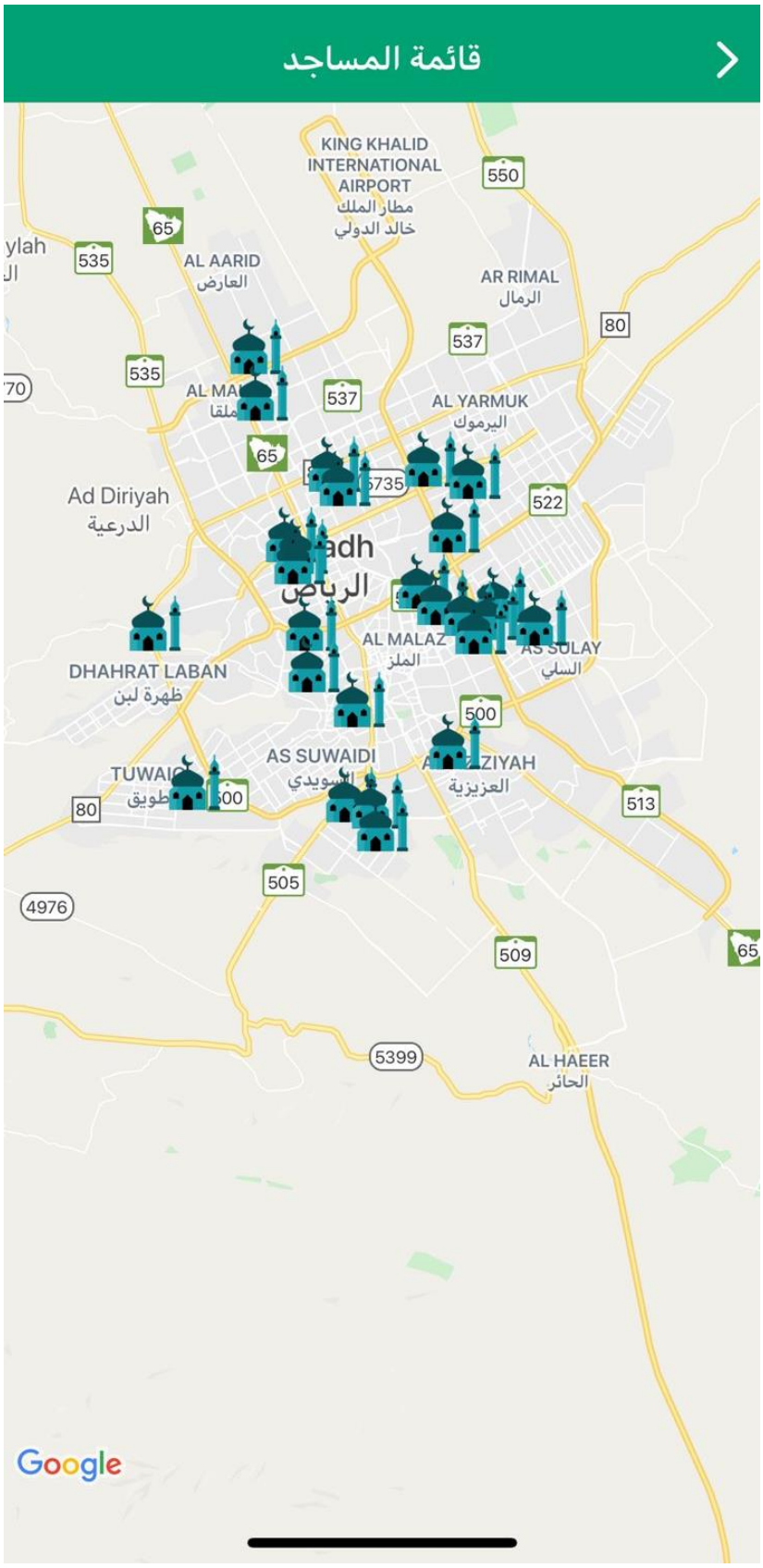
[5] Jenny Donovan, Gillian Woolhead, Rachael Gooberman-Hill, and Joy Adamson, “‘Questerviews’: using questionnaires in qualitative interviews as a method of integrating qualitative and quantitative health services research,” SAGE journals, Jul. 2004.

Appendix

(Appendix A Masjedna Live app)


مسجدنا لايف
مسجدنا لايف
خريطة
اشترك
الإعدادات
حول
كيفية استخدام التطبيق
لغة
النسخة: 2.4 (27)

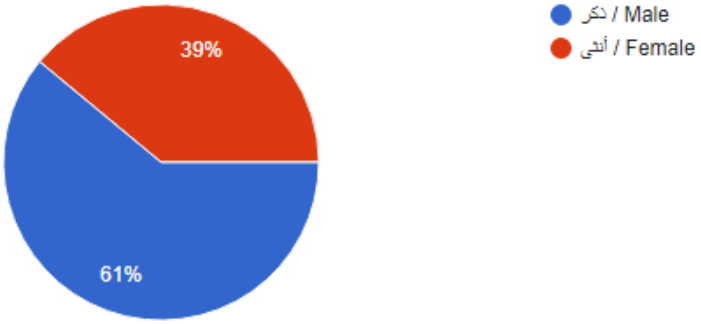

مسجدنا لايف
قائمة المساجد
جامع غزوى المطيري
مشترك
جامع الزهيري
اشترك
مسجد عبد الرحمن الجابر
اشترك


قائمة المساجد
KING KHALID INTERNATIONAL AIRPORT
مطار الملك خالد الدولي
AL AARID
العارض
AR RIMAL
الرمال
AL YARMUK
اليرموك
Ad Diriyah
الدرعية
الرياض
AL MALAZ
الملز
AS SULAY
السلي
DHAHRAT LABAN
ظهرة لبن
AS SUWAIDI
السويدي
AL HAEER
الحائر
Google

(Appendix B Questionnaire result)

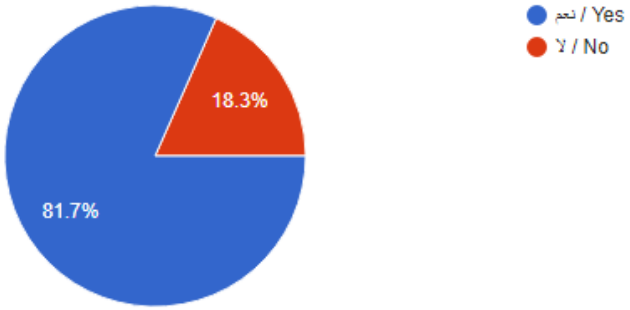
الجنس: / :Gender

218 ردًا



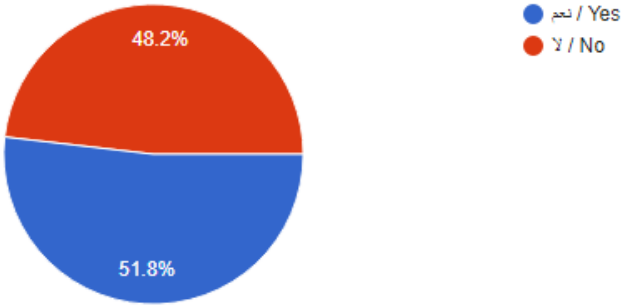
هل سبق وان فاتتك الصلاة بسبب عدم سماعك لصوت الصلاة؟ / Have you ever missed prayer because you did not hear the sound of prayer?

218 ردًا



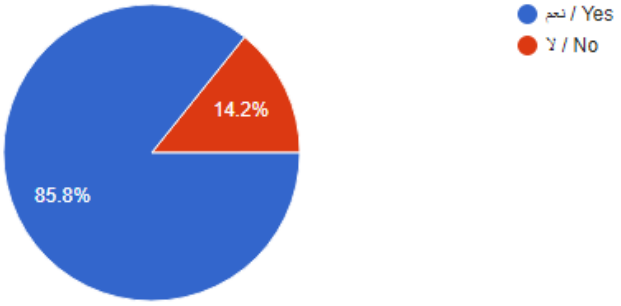
هل تواجه مشكلة في معرفه اوقات الصلاة؟ / ?Are you having trouble knowing that prayer time came in

218 ردًا



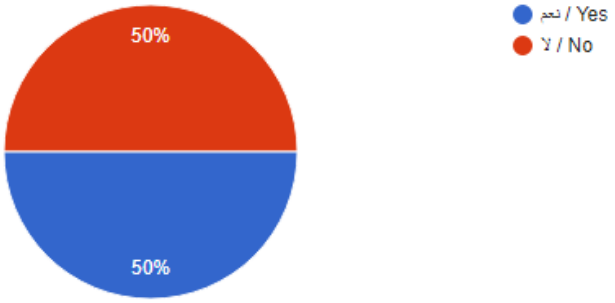
Do you think that having this application will / هل تعتقد انه وجود التطبيق سيساعدك على المحافظة على الصلاة؟
?help you to observing mass prayer in the mosque

218 ردًا



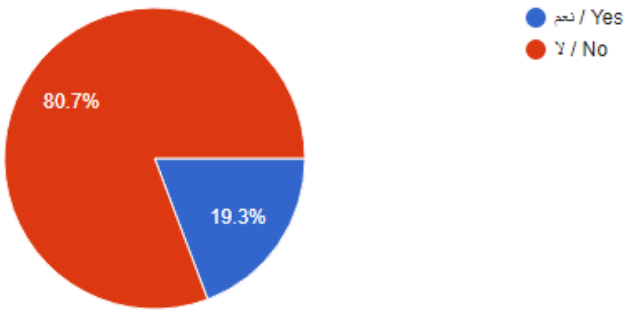
Do you think sending notifications is enough to / هل ترى ان ارسال الاشعارات يكفي لمعرفه دخول وقت الصلاة؟
?know that the time for prayer has entered

218 ردًا



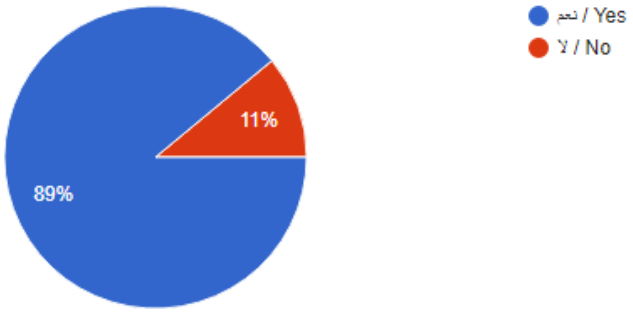
Do you think that the application is enough as / هل تعتقد ان التطبيق يغني عن قرار منع المكبرات الخارجية؟
?substitute for the decision to ban external amplifiers

218 ردًا



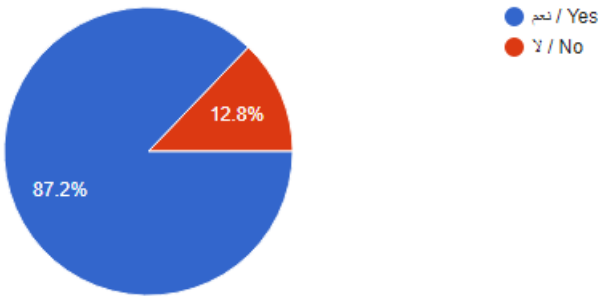
?Do you support an existence for broadcast of the Friday sermon / هل تؤيد وجود بث لخطبة الجمعة؟

218 ردًا



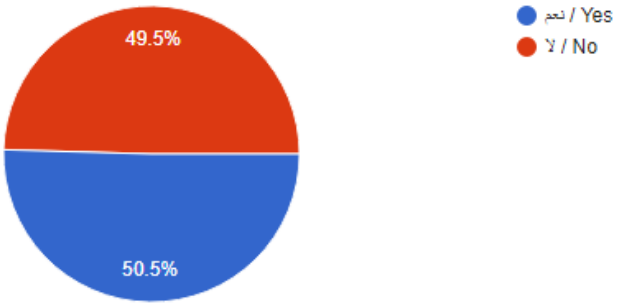
Would you like to donate to complete some mosque / هل ترغب في التبرع لأكمال بعض احتياجات المساجد؟ ?needs

218 ردًا



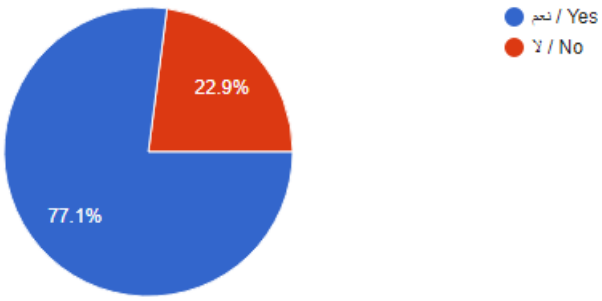
Do you think it is important to save the broadcasts / هل تعتقد انه من المهم حفظ البثوث الخاصة بالصلاوات؟ ?of prayers

218 ردًا



Do you support the existence of an application to broadcast / هل تؤيد وجود تطبيق لبث الصلاة؟ ?prayer

218 ردًا



Write your comments or suggestions for the application (if any) / اكتب ملاحظاتك او اقتراحاتك للتطبيق (اذا وجد)

37 ردًا

لا يوجد

شكراً لكم يا جيل المستقبل على هذه الأفكار العظيمة ♥ استمروا ولكم كل الدعم فأنتم من ستعيدون لهذه الأمة عزها

بالتوفيق لكم متحمسين لتطبيق ولاستخدامه جزاكم الله خيراً .

اتمنى فتح المكبرات وقت الصلاه

اتمنى عودة الصوت

المكبرات الخيت في وقت الصلاة فقط

اختيار المؤذن

نشكر لكم مجهوداتكم العظيمة وبالتوفيق

بدلا من بث الصلاة ، توضع اشارة حمراء وتصبح خضراء عند اقامة الصلاة ، لان البث يتطلب جودة انترنت سريعة وهذه تكون بديلة عنها.

اكتب ملاحظاتك او اقتراحاتك للتطبيق (اذا وجد) / Write your comments or suggestions for the application (if any)

37 ردًا

الله يوفقكم و ان شاء الله المشروع يكون ناجح ❤❤ انتو قدها 💪💪

الله يوفقكم يارب وانتو قدها 🤞

لا يوجد اقتراح

الله يعطيكم العافية واستمرو نحن ندعمكم وشكراً❤❤❤❤

اذا كان المقصود بث الصلوات من المساجد العادية فلا داعي، من اراد السماع يذهب للمسجد، واما مشكلة مكبرات الصوت فينبغي ان يكون القانون فيه مرونة، اما القانون المعمم القائم حاليا قانون جامد تأذى كثير من الناس بسببه، ولو انه وضع بالاساس لعلاج حالات استثنائية للمتضررين من صوت الاذان العالي، اما لشدة علوه او لحساسية سماع احدهم....

طلب إعادة مكبرات الصوت من أجل إعلاء ذكر الله تعالى

اقترح وجود تطبيق لبث الصلوات مع فتح المايك أثناء الصلاة لفائدته

بالنسبة لتطبيق يحدّد وقت الصلاة فهذا متواجد وبكثرة لم أفهم ما الجديد ؟ كذلك الخطب يتم بثّها مباشر ومحفوظة بقناة الحرمين على اليوتيوب .. موفقين

اكتب ملاحظاتك او اقتراحاتك للتطبيق (اذا وجد) / Write your comments or suggestions for the application (if any)

37 ردًا

لا يوجد

شكرًا

الرجاااااء إعادة مكبرات الصوت لبث الصلوات ، لنحي الإيمان في القلوب قبل أن تموت 😔

لا

اتمنى عودة الصلاه الجهريه باسرع وقت

السؤالين الأخيرين لمن يرغب متابعة صلوات الحرمين أو يكون في منطقة بعيدة عن المساجد .والساعات قديما فيها آذان وإقامة قبل البث بالنت بكثير ، من ذلك يتبين أن فكرة البث للصلاة قديمة قدم الدهر ، إنما الجديد أن يوجد مثلا الأذان في أربع جهات في المملكة بأصوات شجية وتقام الصلوات في كل مسجد حسب الإمام ...لكن أذان المسجد والإقامة للصلاة ضرورة لذكر ومحفزة ويبدأ الإنسان في الدعاء والإقامة للشروع في الصلاة ولولا أهميتها لما شرعت في الإسلام والغرب مرافيهم تصدح ولا يخجلون أو يتحرجون أو يقولون مثلنا انزعج الزوار والسياح منها .. نحن في بلد الحرمين إذا لم تصدح المساجد بالأذان والصلوات لطالب البلدان الأخرى برفع آذاننا وصلواتنا !!؟

اتمنى ان ترفع المآذن الصوت عند رفع الاذان بصوت عالي خصوصا في رمضان

A	B	C	D	E
Male / ذكر	Yes / نعم	FALSE		Column A =هل تؤيد وجود تطبيق لبث الصلاة؟ / Do you support the existence of an application to broadcast prayer?
Male / ذكر	Yes / نعم	FALSE		Column B = الجنس: / Gender
Male / ذكر	Yes / نعم	FALSE		Column C= AND(Q1="أنثى / Female"Q2="نعم / Yes")
Male / ذكر	Yes / نعم	FALSE		.=COUNTIF(C:C,TRUE) this cell will count the number of true in column C
Male / ذكر	Yes / نعم	FALSE		73
Male / ذكر	Yes / نعم	FALSE		
Male / ذكر	Yes / نعم	FALSE		
Male / ذكر	No / لا	FALSE		
Female / أنثى	Yes / نعم	TRUE		
Male / ذكر	Yes / نعم	FALSE		
Female / أنثى	Yes / نعم	TRUE		
Female / أنثى	Yes / نعم	TRUE		
Male / ذكر	Yes / نعم	FALSE		
Female / أنثى	Yes / نعم	TRUE		
Male / ذكر	Yes / نعم	FALSE		
Female / أنثى	No / لا	FALSE		
Male / ذكر	Yes / نعم	FALSE		
Male / ذكر	Yes / نعم	FALSE		
Male / ذكر	No / لا	FALSE		
Female / أنثى	Yes / نعم	TRUE		

(Appendix C BPMN Diagram (To-Be) in Arabic)