

# Jeddah Cultural and Social Hub Architectural Design Proposal

Tamara Bajaber\*, Mohammed M.F. Mohammed

Department of Architecture, College of Architecture and Design, Effat University, Qasr Khuzam St., Kilo. 2, Old Mecca Road.  
P.O.BOX 34689, Jeddah 21478, Saudi Arabia

*Received September 15, 2021; Revised March 15, 2022; Accepted April 19, 2022*

## **Cite This Paper in the following Citation Styles**

**(a):** [1] Tamara Bajaber, Mohammed M.F. Mohammed, "Jeddah Cultural and Social Hub Architectural Design Proposal," *Civil Engineering and Architecture*, Vol. 10, No. 3A, pp. 27 - 36, 2022. DOI: 10.13189/cea.2022.101304.

**(b):** Tamara Bajaber, Mohammed M.F. Mohammed (2022). *Jeddah Cultural and Social Hub Architectural Design Proposal*. *Civil Engineering and Architecture*, 10(3A), 27 - 36. DOI: 10.13189/cea.2022.101304.

Copyright©2022 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

**Abstract** Jeddah Cultural Hub is a place to represent the modern and the traditional culture of Jeddah by establishing museums, galleries, and open spaces to the activities that are related to the culture and art. Therefore, it will include an open library and a center for literary arts. The targeted stakeholders are youth, families and expats. Also it is a place to enhance the social interaction. The goal of the project is to introduce the cultural value of Jeddah, to enhance the communication, and to let the people get more socialized. The suggested space program for the project is made of galleries and exhibition halls, library, arts and culture center, recreational zone internal, recreational zone external, administration, auditorium, and services. The site is chosen based on the site evaluation criteria, which is located on Kurnaysh road, Alshatea district, in front of Alnawras roundabout. In general, this project creates a cultural hub at a lively area in Jeddah, which promotes the importance of Jeddah culture and create social hubs through established learning centers that have different art fields such as music and poetry.

**Keywords** Cultural Hub, Social Hub, Modern Culture, Traditional Culture, Learning Centers

## **1. Introduction**

In the 1970s, French sociologist Pierre Bourdieu developed the concept of cultural capital to explain how power is transferred in society and how to maintain social

class [1, 2]. He also added that cultural capital has played an important and subtle role. Bourdieu [1] believes that people of different social status have three different forms of capital, such as social capital, cultural capital, and economic capital, each of which can be seen as a resource that helps to obtain or maintain good [2].

The cultural and social center allows people to use these knowledge, behaviors and skills to demonstrate a person's cultural capabilities and social status, and is also a place for accumulation of knowledge, behaviors and skills [3]. Cole [3] stated that with regard to norms, customs, and skills, such as table manners, language, and gender behavior, people often exhibit specific cultural capital when traveling the world and interacting with others. Wang, McNally, and Lenihan [4] outlined that social capital has been empirically proven to have a positive impact on management topics, including employment, career success, reduced turnover rates, inter-organizational communication, inter-company learning, entrepreneurship, and product innovation. In addition, combining a cultural change management plan with smart workplace transformation can have a significant impact on employee performance and engagement, because it brings cultural change [5].

Saudi Arabia has rich culture traditions and it is defined by the Islamic heritage and its historical role as an ancient trade center. Saudi society and culture has developed over years, and their values and traditions are acclimatizing with modernization [6]. The unique geographical location makes Saudi Arabia a strategic place to facilitate international trade routes and crossroads of cultural and

cultural exchanges [7, 8]. Saudi society established a library in Riyadh and Saudi Arabia's first cultural center. King Fahd Library is one of the largest collections of rare manuscripts of Arabic and Islamic literature. Furthermore, poetry is particularly important to Arab cultural life and is considered to be one of the highest expressions of literature and art. In addition to folk music and dance, the cultural heritage of Saudi Arabia is also celebrated at the annual Jenadriyah National Cultural and Heritage Festival to promote culture. The Youth Welfare Administration encourages and develops the arts, and regularly organizes competitions and exhibitions [7, 9]. It also arranges Saudi Arabian art exhibitions abroad, provides an international forum for Saudi artists, and strengthens cultural ties with Arab and Western countries. Saudi Arabia has variety of art types and folk music and the traditional dance in each region, for example the type of dance in Hijaz or western Saudi Arabia is called Mizmar, in central region its Al-ardha and in the eastern is Samri. Those are the traditional dances in each region of Saudi Arabia [10, 11]. Cultural activities of Saudi Arabia have developed and also have established the general culture authority that holds the cultural activities and the events.

Jeddah is a coastal city, which is situated in the western region of Saudi Arabia. Jeddah has a rich culture and it has a unique identity, a different architectural, urban design, and a historical value. Jeddah city is also the principal gateway to Makkah. Jeddah people are sticking to their culture and traditions, and they are known for their literatures and arts, also in how they are interested in their heritage by conserving their culture. Many museums in Jeddah were established to present the history and the culture of Jeddah. Moreover, there are museums that represent the arts, such as the open-air sculptures museum, and the Castle of Cultural Arts museum that represent the chronicles musical history of Saudi Arabia and also the general history of the country. The aim of the owner is to revive the musical culture of the country. Jeddah has developed and grew from the south to the north and many changes happened in the culture, society, and the architecture style of the city. Also a new cultural event has established within the support of General Culture Authority and General Authority for Entrainment.

## 2. Case Studies

The chosen case studies in this study are related to the culture and art centers in different places. This section discusses the program analysis and the floor plans analysis also the site criteria, project concept, philosophy and description of the case studies. The chosen case studies are Shaikh Jaber Al Ahmad Cultural Center, Kuwait and the New Cultural Center and Library, Sweden. Both case studies emphasize and encourage people to participate in cultural and social activities consistent with the goals of the current project.

### 2.1. Shaikh Jaber Al Ahmad Cultural Center

The Shaikh Jaber Al Ahmad Cultural Center is located at Kuwait, designed by SSH International Architect (Figure 1). Shaikh Jaber Al Ahmad Cultural Center is one of three distinctive centers taking shape in Kuwait's new cultural district [12]. The district includes the Sheikh Jaber Al Ahmad Cultural Center, Sheikh Abdullah Cultural Center and Al-Salam Museum. The museum will boast contemporary theaters, concert halls, cinemas, conference and exhibition halls, a library and museums. The project is being procured on a design build basis and SSH has been appointed by Al Hani Construction and Trading Company.



Figure 1. Shaikh Jaber Al Ahmad Cultural Center [12]

The design intention of Jaber Al Ahmad Cultural Center is to create a project that is deeply related to the culture and the history of Kuwait, while giving a great attention to making it a visually attractive place. The concept of solids and voids was inspired by the relationship between the seashell and the pearl, which is related to the historical Kuwaiti pearl diving and trade. The design concept of the skin is inspired by Islamic geometry; the local culture is reinterpreted in architecture through the use of technology, conveying complexity in a simple way. Islamic patterns were created to meet cultural needs for privacy, landscape and shadows.

The site is located at Flag Square in Kuwait city. Flag square area is surrounded by residential and commercial type of buildings. The site has two accessibility points, the first access is from Jamal Abdul Nasser Street and the other access is from Arabian Gulf Street [12].

The center is composed of four connected buildings, which jointly showcase the performing arts of Kuwait. It constitutes the focal point of Kuwait's new ethnic cultural zone. Project functions are theater center, music center, conference center and a national library. The building below is mainly constructed of concrete and includes a large excavated basement connected to a series of service tunnels and MEP areas. These buildings circulate independently through stairs, elevators and sidewalks. In most cases, the access to public floors is upward from the ground.

The trend in this case study is daylight, where the shell is the main layer that controls daylight and shading. The

geometrics opening decrease in size towards the top. This allows the cool daylight into the hallways and to minimize the hot direct sun. Also the variety of openings creates patterns of shadows to the interior spaces.

## 2.2. The New Cultural center and Library

The New Cultural center and Library of Sweden is designed by Schmidt Hammer Lassen Architects (Figure 2). The Cultural Centre and Library in Karlshamn, Sweden, is designed to collect the city's cultural functions under one roof. Schmidt Hammer Lassen architects have won an international competition to design the cultural center. The cultural center contains a library, an exhibition area, a cinema, a tourist office and a café [13].

The main concept of the building was related to the surroundings and to gather activities in one building. Also to create a meeting place to socialize, communicate, and create a focal point that is connecting landscape and the water. The façade and the roof are designed to meet the scale of the surroundings and to create a distinctive shape. The main focus of designing this building was the visual contact, which is done in the large glass façade that ensures visual contact between the inside of the building and the surroundings.

The building is located on Ostra Piren between the industrial harbors and a local folk high school. The main access to the cultural and library is from the square at Ostra Piren. The building integrated with its surroundings and it is considered as focal point that connected the city with the waterside.

The building consists of two floors, the ground floor contains the exhibition arts hall, cinema hall, tourist office, café a school parlor and a children area. And the first floor consists of offices, administrative and learning classes [13].

The trend in this case study is environmental, where the facade of the building is clad with strong wooden lamellar to reduce solar gain while letting visual contact, which is the main focus of the design concept, to contact with the internal of the building.



Figure 2. The New Cultural center and Library [13]

All in all, the two case studies show how the cultural hubs are designed according to the surroundings environment and how to focus on connecting the building with the city. According to Jeddah Cultural Hub project, it will consider the surroundings to make a strong connection between the Jeddah city and the cultural center. Therefore, the adoption of design concepts such as project location and space zoning from the two case studies can add value to the design planning of the current project.

## 3. Space Program

This section discusses the space program, which is calculated according to the standards of designing this type of projects. Also it represents the building user's capacity. The building capacity is calculated according to the number of visitors.

In general, the project requirements consisted of museum, gallery, exhibition halls, open library and open spaces for different activities. The museum will represent the history of Jeddah. The gallery is the showcase of different art types in Jeddah. The exhibition halls will hold the art and culture show hall. The library will contain spaces for workshops. The arts and culture center will have three main learning sections (arts, music and poetry). The open spaces will hold different activities that are related to the arts and culture.

Table 1 and Table 2 tabulate the zoning program and overall site program assumption respectively. In specified, there are eight main zones in the project namely galleries and exhibition halls, library, arts and culture center, recreational zone internal, recreational zone external, administration, auditorium, and services.

Table 1. Zoning space program

Zones	Net Area (m <sup>2</sup> )	Percentage (%)	User capacity
Galleries and exhibition halls	4467	27.67	3261
Library	1686	10.45	1120
Arts and culture center	7330	45.41	2897
Recreational zone internal	487	3.02	72
Recreational zone external	693	4.29	323
Administration	633	3.92	374
Auditorium	665	4.12	454
Services	180	1.12	66
Total	16141	100	8567

**Table 2.** Overall site program assumption

Criteria	Parameter
Total site area assumption	17,000 m <sup>2</sup>
Footprint Area (60%)	10,200 m <sup>2</sup>
GFA + (15% circulation)	20,400 m <sup>2</sup>
Expected No. User capacity	8,331 users

### 4. Site Selection and Analysis

This section introduces site selection proposal, criteria and site analysis. Site selection criteria depend on needs and the context. Moreover, the selection of the site is according to a specific criteria that includes views, accessibility, fulfill user needs and to be adaptable with the surroundings. Figure 3 and Figure 4 illustrate Site 1 and Site 2, respectively.

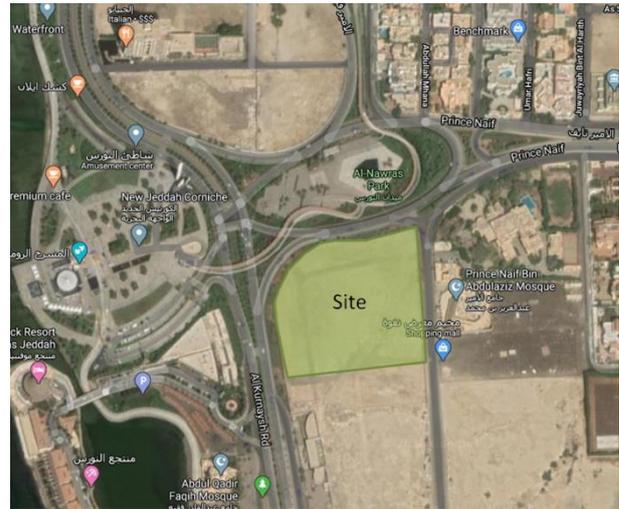
Figure 3 shows Site 1 is located in North Jeddah near to Jeddah economic city, Obhur. The site has accessibility points from Prince Abdullah Al-Faisal St. and it also can be accessed from Jeddah economic city directly to the site. The site selection was based on, views, accessibility points, users' needs and the site surroundings. The total site area is approximate 21,000 sqm. And the total distance from the site to the kingdom tower is approximately 52 meters.



**Figure 3.** Site 1 [14]

Figure 4 shows Site 2 is located on Kurnaysh road, Alshatea district, in front of Alnawras roundabout. The site

can be accessed from two main roads ; the first access is from Cornish road, and the second access from Prince Naif road. The selection was based on views, accessibility and vitality of the area. The total site area is approximately 22,000 sqm.



**Figure 4.** Site 2 [15]

According to the situation of the site, the evaluation value of each criterion of each site is given, ranging from 1 to 5, whereby 1 is less important and 5 is very important. The score of each standard is the product of the WF of each criterion and the evaluation value. Therefore, the highest score in the selected venue is selected as the project venue location. The explanations of each criterion are demonstrated in Table 3 and the site valuation outcome is presented in Table 4.

In reference to site assessment result in Table 4, the best alternative is Site 2, situated in Al-Shate'a neighborhood. The site selection was under the site criteria study. The site is located on a strategic point, it is connected to 2 main commercial axes, Cornish road and Prince Naif Street, and it is located on a vital area that has different urban zones, such as commercial, residential and educational zones. The distance between the site and airport is approximately 5 Kilometers. Also between the city center and the site, the distance is approximately 6 Kilometers. Furthermore, the distance between the selected site and Jeddah economic city is approximately 10 Kilometers. Cornish road is considered as (main commercial axes) category, according to Jeddah Municipality codes and regulations. Thus, the percentage of the built area is 60%, and the number of floors could be up to 10 floors.

**Table 3.** Explanation of site assessment standards

Criteria	WF	Explanation
Site capacity	3	The total area of the site should be greater than the usable area of the land. When estimating, special restrictions should be considered.
Shape/proportional	2	The rectangular land shape is preferable because it is usually the easiest to plan.
Topography	2	To ensure a good drainage system, the site prefers a gently inclined height and profile
Accessibility	3	The traffic pattern at the main entrance of the street is an important criterion to consider. Therefore, entering the site from secondary arterial roads is better than entering from chaotic traffic corridors or low-traffic neighborhood housing streets.
Noise level	2	Noise pollution is an intangible hazard that directly affects human health. Therefore, avoid close to noisy industrial areas and main roads where heavy vehicles often pass by.
Utilities	1	The place should have electricity, water, gas, sewer and other service facilities. Especially it is best to have a good water supply network and adequate sewage and waste treatment systems
Security and safety	3	The location needs better fire department, police station and medical services. In addition, avoid close to manufacturing plants areas to avoid industrial hazards and pollutants.
Image-visual quality	3	The quality of the community around the site needs to supplement the site rather than detract from it. The site should be located in an area with a strong positive identity and image. The site should be compatible with the surrounding existing and proposed land uses.
Visibility	3	A conspicuous position is required to lure a lot of visitors. A highly visible and easily accessible location along the main street is perfect. If there are other buildings in the same place, the most conspicuous part of the place should be considered
Future development plan	3	The value of the site may change based on the measurement of the future development potential in the vicinity of the selected site, which will have an impact on the site.
Demographic pattern	2	The site prefers places where society often gathers so that people can plan their itineraries more conveniently on the same route. In addition, the largest percentage of service workers often stay at the site during their normal activities is a plus.
Surrounding	3	The project must be integrated with the surrounding environment to help achieve the project goals. Therefore, the surrounding area of the site should be related to the main function of the plan.
Views	3	The vision from the location to the surrounding
Site is nearby activity zone	3	The places that is near to the site, that are having related activities.
Pedestrian accessibility	3	Pedestrian access is important to the project.
Main streets connections	3	Easy access to nearby main streets.

**Table 4.** Site assessment result

Site Standards	WF (1-3)	Sits 1 – Obhur		Site 2 - Alshate'a	
		Evaluation	Score	Evaluation	Score
Site capacity	3	4	12	4	12
Shape	2	5	10	5	10
Topography	2	4	8	2	4
Accessibility	3	3	9	5	15
Noise level	2	1	2	3	6
Utilities	1	3	3	3	3
Security and safety	3	5	15	5	15
Image-visual quality	3	4	12	5	15
Visibility	3	3	9	5	15
Future development plan	3	5	15	4	12
Demographic pattern	2	3	6	5	10
Surrounding	3	3	9	4	12
Views	3	2	6	5	15
Site is nearby activity zone	3	3	9	5	15
Pedestrian accessibility	3	1	3	4	12
Main streets connections	3	2	6	4	12
Total			134		183

Figure 5 illustrates the site has two access points; the main access is from the Cornish road, which is considered as (main commercial axes), also the site is accessed from Prince Faisal bin Fahd Street, and other secondary street that is connected to the two streets together. Furthermore, the site can be accessed from Hera'a Street too, which is intersected by King Abdul-Aziz road.

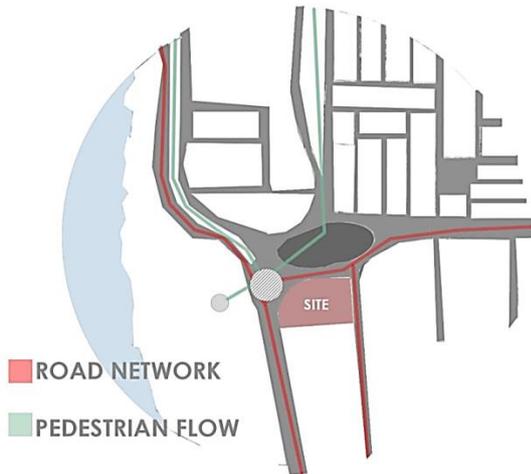


Figure 5. Accessibility

temperature in Jeddah is 50 °C and the average is between 43 °C and 47 °C. Jeddah has very less precipitation. In term of humidity level, Jeddah is a coastal city which causes a high level of humidity, and according to the studies, the humidity level of Jeddah in the last 10 years was between 98% and 100%.

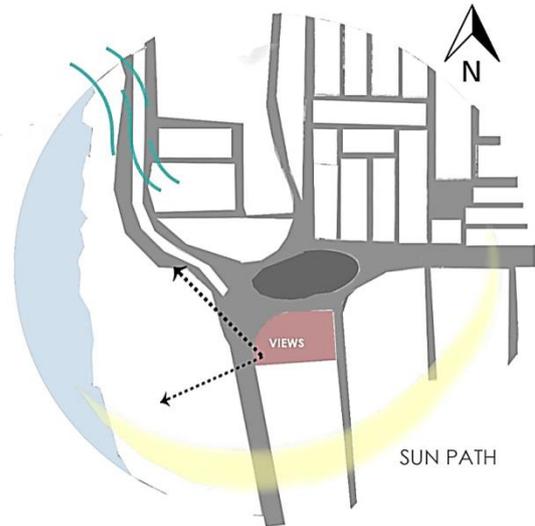


Figure 7. Site views and sun path

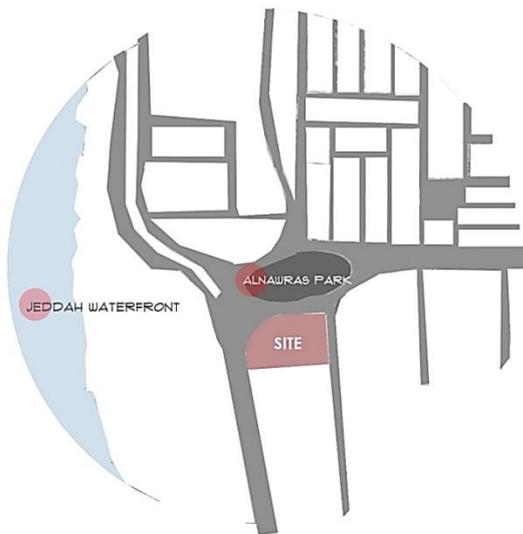


Figure 6. Landmarks

Figure 6 demonstrates the landmarks at the selected site which are Jeddah waterfront and Alnawras Park. Figure 7 depicts the site views and sun path of the site where the site has nice view at west direction. The site faces the prevailing wind in the northwest. Regarding the temperature and precipitation analysis, the maximum

All in all, the site's strengths are high accessibility to the site, focal point/ visibility, surroundings, the site shape is proportional, and pedestrian walkway nearby the site. At the same time, the constraint of the selected site is congestion during peak hours.

### 5. Zoning and Project Design

The design concept is to showcase the arts and culture of Jeddah in a contemporary way to attract Jeddah people, to enhance tourism, also to increase the awareness of how valuable the culture of Jeddah and how it affects the social and economic aspects. The project also uses new attractive technology to represent Jeddah culture in a contemporary way. In addition, the external recreation area is designed as a public open space to ensure sustainable development and promote social cohesion [16].

Figure 8 shows the general bubble diagram of Jeddah Cultural hub. Figure 9, 10 and 11 illustrate the bubble diagram of exhibitions and galleries, library as well as arts and culture educational center respectively. The design motivation for the next step is to connect the building with surroundings and to design the building based on the site analysis as the zoning diagram.

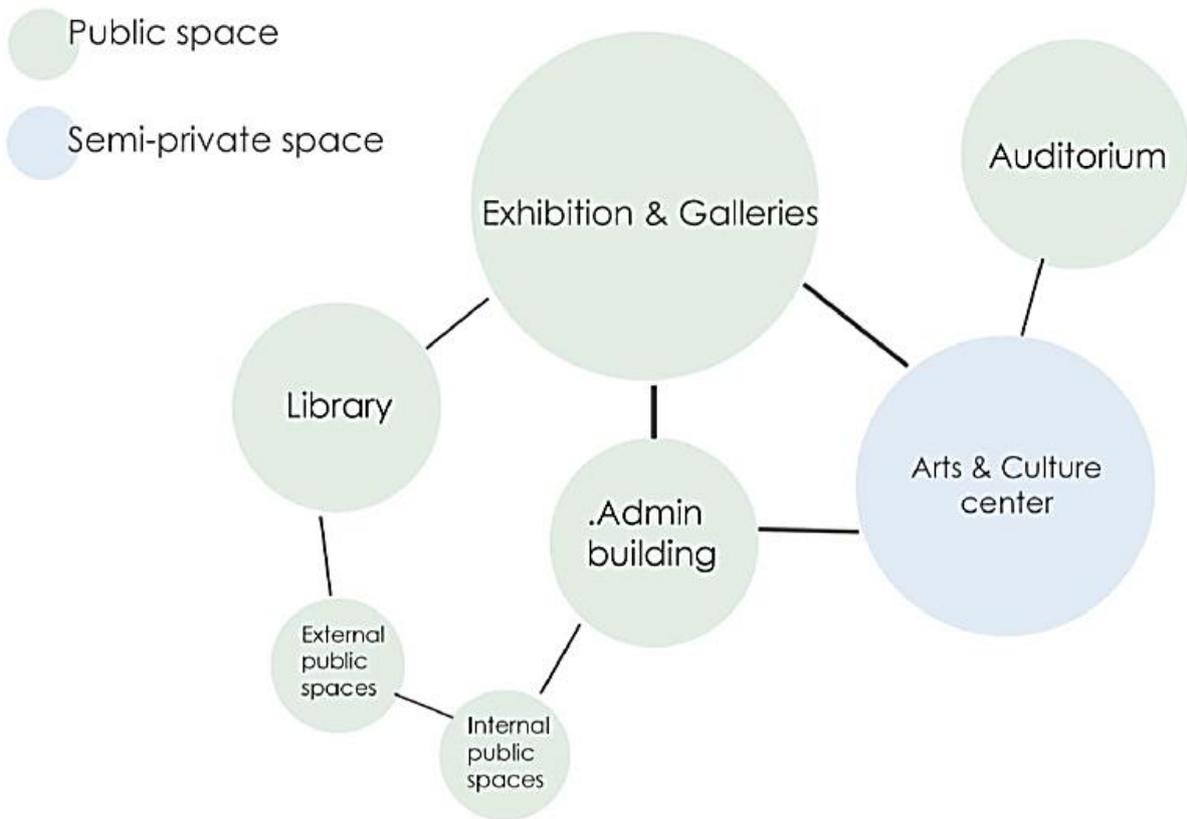


Figure 8. General bubble diagram of Jeddah Cultural hub

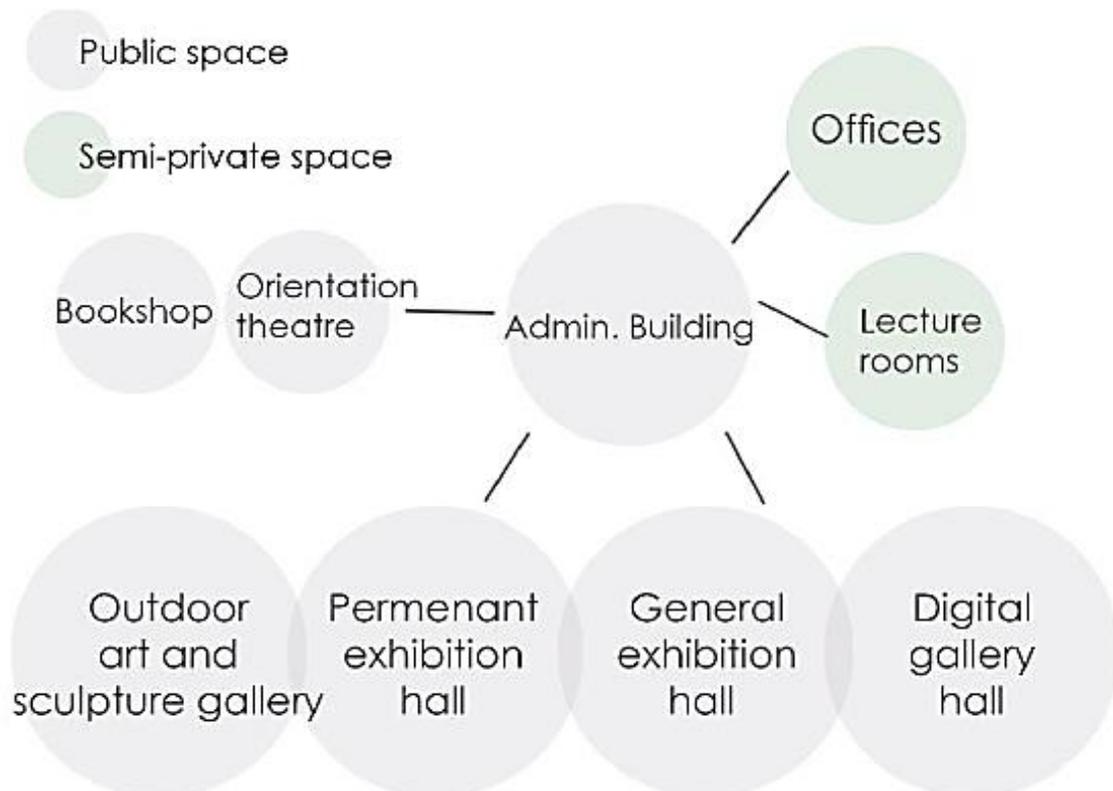


Figure 9. Bubble diagram of exhibitions and galleries

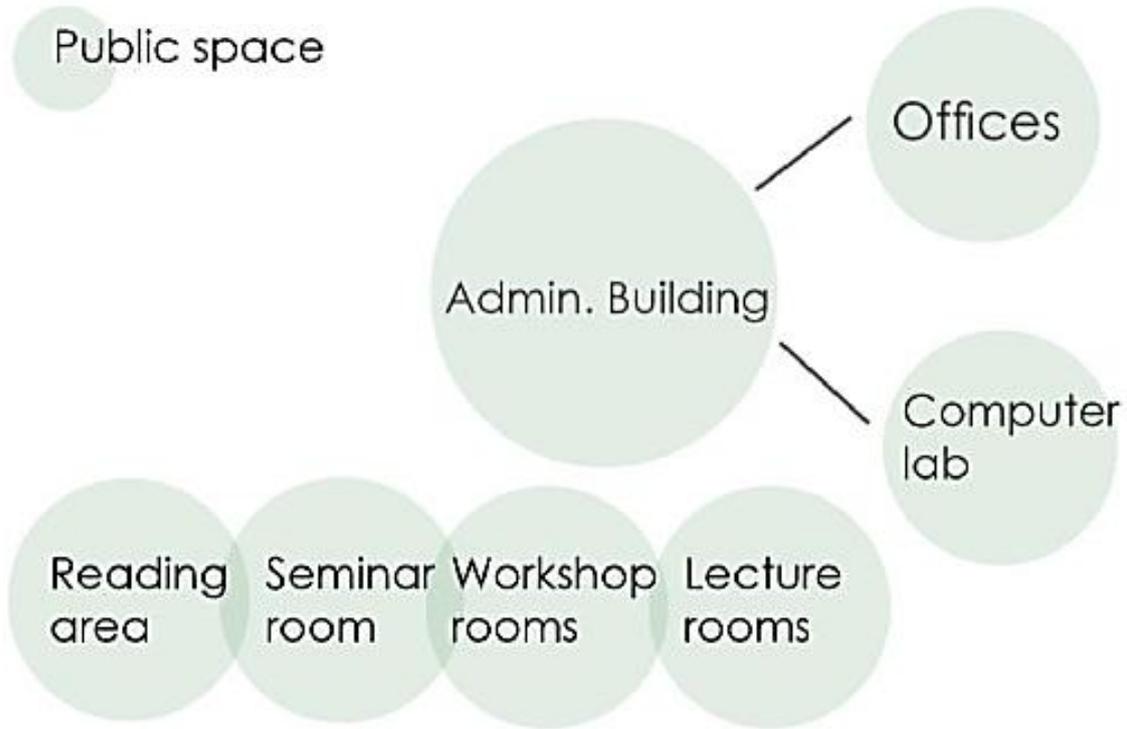


Figure 10. Bubble diagram of library

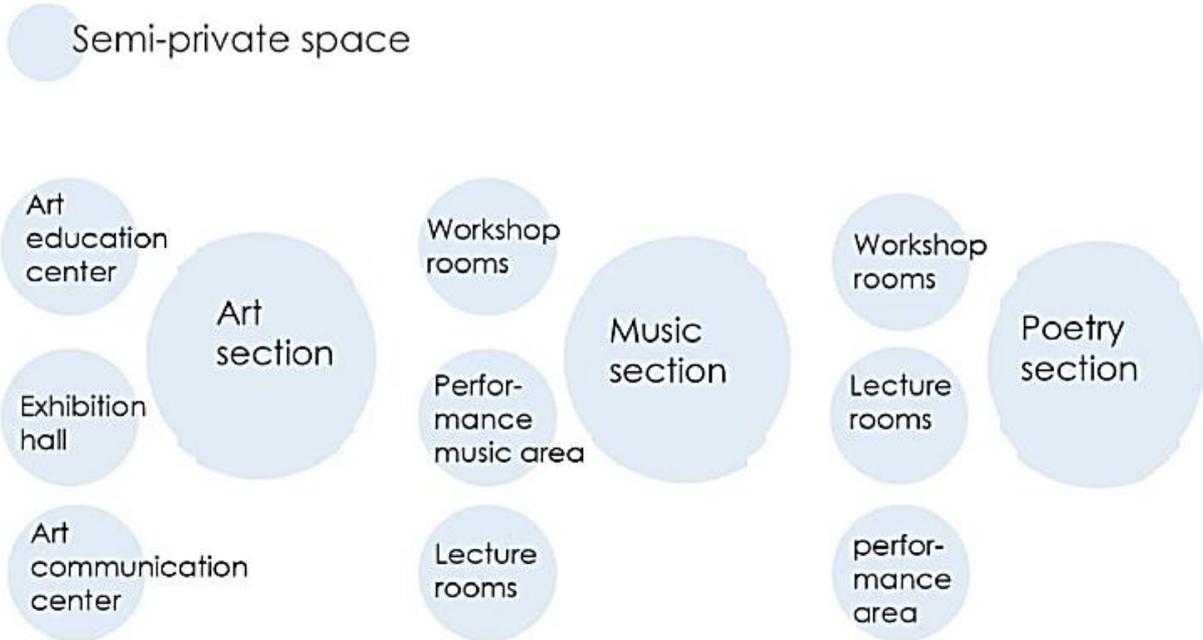


Figure 11. Bubble diagram of arts and culture educational center

Figure 12 and Figure 13 show the ground floor zoning and first floor zoning respectively. The project site plan has three entrances at administration area (main entrance), and

public outdoor area (second and third entrance). The first floor has classroom, exhibition and galleries as well as arts learning center.

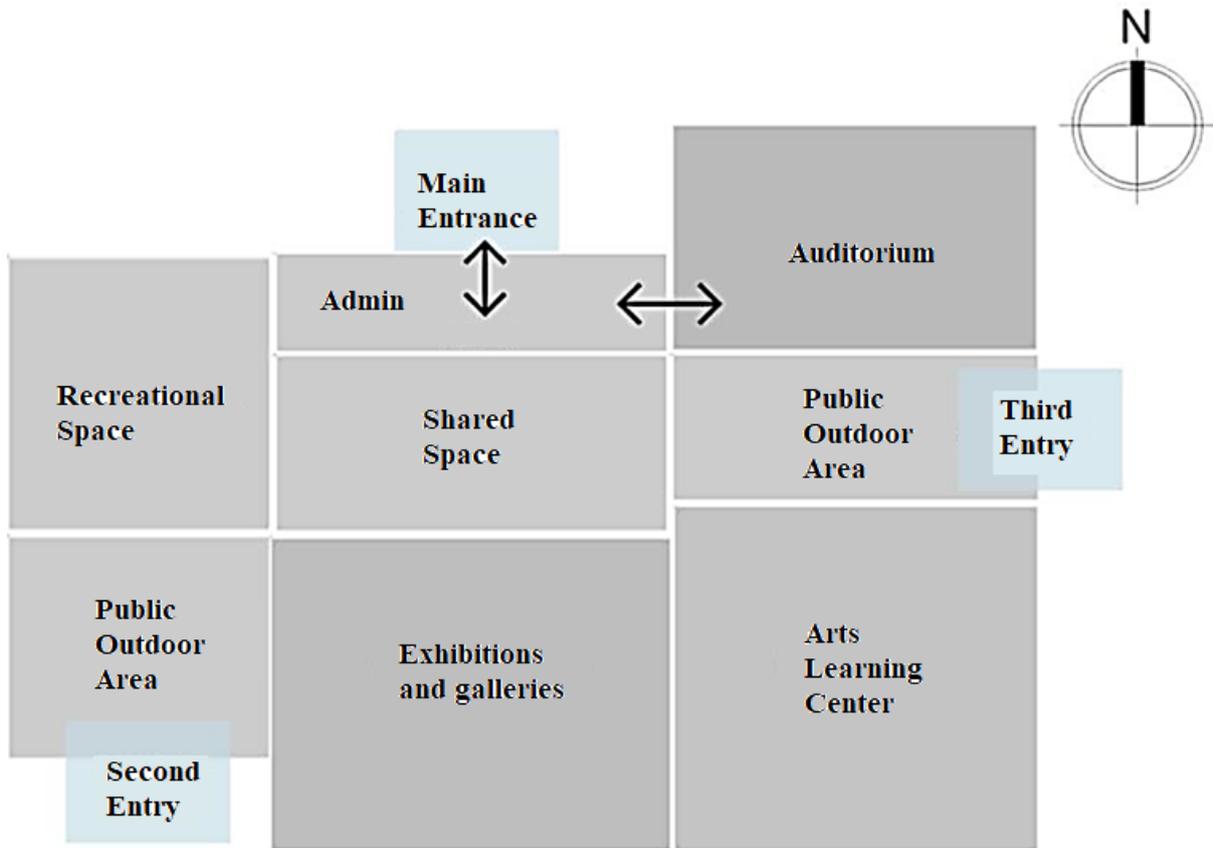


Figure 12. Ground floor zoning

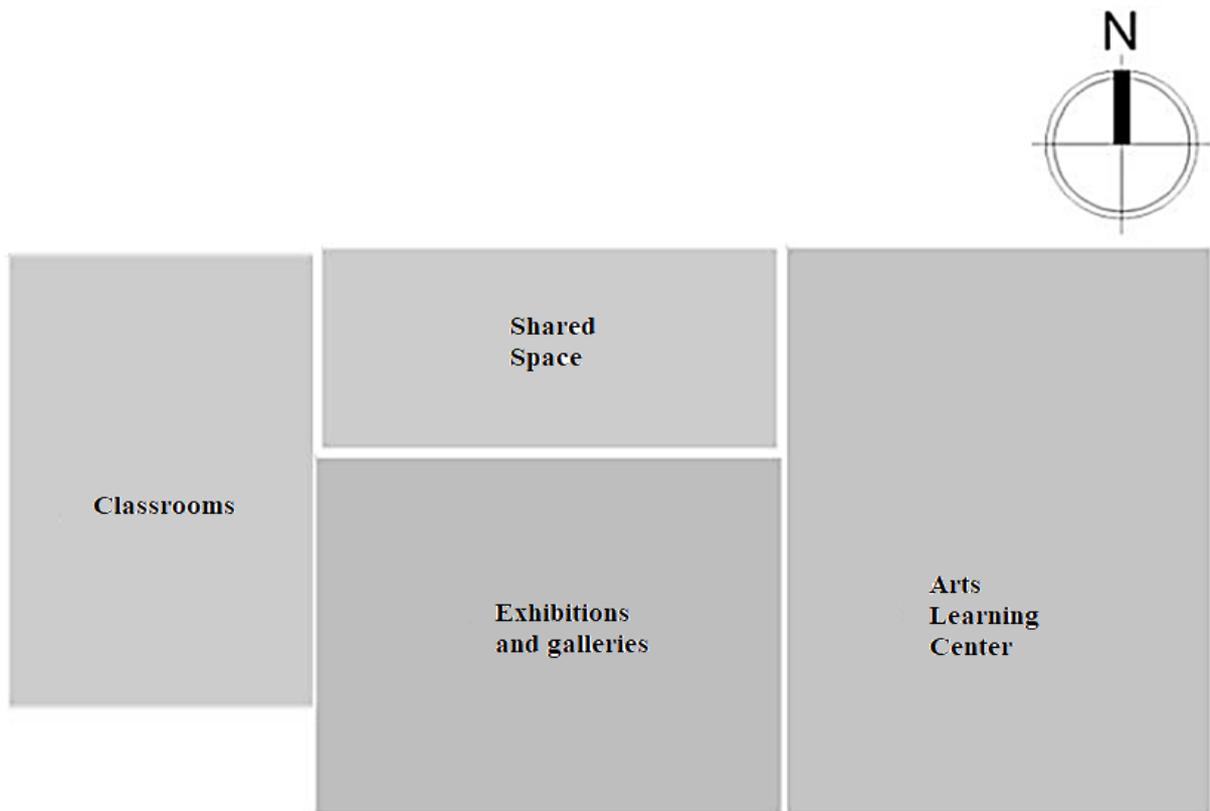


Figure 13. First floor zoning

## 6. Conclusion

The proposed project will increase the awareness of the importance of the culture and to have a place for learning, creating and socializing. Jeddah Cultural Hub will include gallery and museum that represent the culture of Jeddah, and that will be presented in more interactive way to attract people. Also it will have a library, arts and culture learning center, and workshops will be provided for the visitors, to enhance the skills of the beginners and for those who are interested in arts and culture. Moreover, it will include social hubs, a space that includes several activities and areas for socializing, meeting places and event space. The floor zoning map provided in this study allocates the floor plan in detail according to the surrounding environment and other influencing factors such as site accessibility and surrounding conditions. All in all, Jeddah cultural hub will be a meeting place for Jeddah people, also to have a place for learning and entertainment, and communicating in one building. Establishing Jeddah cultural hub is a way of achieving a goal of Saudi vision 2030, which is, promoting culture and entertainment in GCA.

## Acknowledgements

The authors would like to acknowledge the encouragement and unconditional support of the project manager and Effat University.

## REFERENCES

- [1] P. Bourdieu. *Distinction. A Social Critique of the Judgement of Taste*. London: Routledge, 1984.
- [2] S. Raskoff. *Social and Cultural Capital at School*, 2014, Online available from <https://www.everydaysociologyblog.com/2014/11/social-and-cultural-capital-at-school.html>
- [3] N. L. Cole. *What Is Cultural Capital? Do I Have It?*, 2020, Online available from [thoughtco.com/what-is-cultural-capital-do-i-have-it-3026374](http://thoughtco.com/what-is-cultural-capital-do-i-have-it-3026374)
- [4] Z. Wang, R. McNally, and H. Lenihan. The role of social capital and culture on social decision-making constraints: A multilevel investigation, *European Management Journal*, 2018, DOI: 10.1016/j.emj.2018.04.004
- [5] S. E. Ulukan. Integrating Cultural Change Management Program with Smart Workplace Transformation and Refurbishment Project Schedule, *Civil Engineering and Architecture Vol. 8, No. 5*, pp. 847 - 859, 2020. DOI: 10.13189/cea.2020.080512
- [6] M. Achoui. *The Saudi society: Tradition and change*. 1-7, 2006, DOI: 10.1017/CBO9780511489822.033.
- [7] Culture, Traditions and Art, Saudi Arabian Cultural Mission, 2005, Online available from <https://sacm.org.au/culture-traditions-and-art/>
- [8] Know About Kingdom. 2019, Online available from [https://www.my.gov.sa/wps/portal/snp/aboutksa/aboutksa!/ut/p/z1/04\\_Sj9CPykssy0xPLMnMz0vMAfIjo8zivQN9D DycTAz9\\_f0MzQwCA0NcnH28Q40MDAz0w8EKvAIsT AwdDYAKjE2dDAKdfc39HYPDDA0MTPWjiNFvgAM 4GhDWHwVWgnCBu5cJ0AWGoUamXmEGBt4mGAow nQhWgMcNwal5-gW5oREGmQHApAHKHERc!/](https://www.my.gov.sa/wps/portal/snp/aboutksa/aboutksa!/ut/p/z1/04_Sj9CPykssy0xPLMnMz0vMAfIjo8zivQN9D DycTAz9_f0MzQwCA0NcnH28Q40MDAz0w8EKvAIsT AwdDYAKjE2dDAKdfc39HYPDDA0MTPWjiNFvgAM 4GhDWHwVWgnCBu5cJ0AWGoUamXmEGBt4mGAow nQhWgMcNwal5-gW5oREGmQHApAHKHERc!/)
- [9] About Saudi Arabia, The Embassy of the Kingdom of Saudi Arabia, Online available from <https://www.saudiembassy.net/sports-and-recreation>
- [10] Music and Dance in Saudi Arabia, 2019, Online available from <https://fanack.com/saudi-arabia/society-media-culture/culture/music-and-dance/>
- [11] H. C. Kay, and L. C. Nicole. *Saudi Folk Music: Alive and Well - Saudi Aramco World*. Aramco World, 2007, Online available from <https://archive.aramcoworld.com/issue/200702/saudi.folk.music.alive.and.well.htm>
- [12] Sheikh Jaber Al Ahmad Cultural Centre, Archinect Firms, Online available from <https://archinect.com/sshic/project/sheikh-jaber-al-ahmad-cultural-centre>
- [13] Furuto. *New Culture Centre and Library Winning Proposal / schmidt hammer lassen architects*, Archdaily, 2013, Online available from <https://www.archdaily.com/324857/new-culture-centre-and-library-winning-proposal-schmidt-hammer-lassen-architects>
- [14] Google Maps. 21°44'28.1"N 39°04'37.1"E, 2020, Online available from <https://www.google.com/maps/place/21%C2%B044'28.1%22N+39%C2%B004'37.1%22E/@21.741132,39.0747923,800m/data=!3m2!1e3!4b1!4m6!3m5!1s0x0:0x0!7e2!8m2!3d21.7411318!4d39.0769815?hl=en&authser=0>
- [15] Google Maps. 21°35'21.0"N 39°06'33.4"E, 2020, Online available from <https://www.google.com/maps/place/21%C2%B035'21.0%22N+39%C2%B006'33.4%22E/@21.589174,39.1074368,801m/data=!3m2!1e3!4b1!4m6!3m5!1s0x0:0x0!7e2!8m2!3d21.5891745!4d39.1092639?hl=en&authser=0>
- [16] S. Begum. *Reclaiming Public Open Space within the Shifting Landscape of Dhaka, Bangladesh*, *Civil Engineering and Architecture Vol. 8, No. 6*, pp. 1178 - 1193, 2020. DOI: 10.13189/cea.2020.080603