

Design and Develop mobile application for Tamy Jewelers Boutique

Fatema Mohammed Obaid Al Mamari, Student, Department of Computing, Middle East College, Muscat, Oman
Aparna Agarwal, Faculty, Department of Computing, Middle East College, Muscat, Oman
Vikas Rao Naidu, Faculty, Department of Computing, Middle East College, Muscat, Oman

Abstract

Jewellery has always been an imperative part of human life for eternities and it also plays an important role in incrementing the revenues of any country. Jewellery continues to be considered an important asset for people. Shopping for jewellery has at all times been hectic as it involves searching different stores to finally come across a piece that suits your choice and budget. In the recent pandemic situation, businesses have been forced to move online with no exception for jewellers. This will make jewellery shopping convenient for the shoppers. This research work is aimed at designing and developing a mobile application for “Tamy Jewellers” that facilitates easy shopping online thus avoiding crowds in the shops during festive and marriage seasons makes it manageable for the owners to provide services to the customers at an economical cost and setup. The customers can have a detailed look at the jewellery designs, add their feedback on the application, and avail the offers advertised by the owners on the application. This will enable the delivery at your doorstep and the payment mechanism can be chosen as per the customer’s preferences. The jeweller is also saved of the strain of showing the jewellery pieces to the customers one by one and putting them back safely. The customer can choose the category of jewellery, price range etc., and proceed at their own pace for shopping. Also if the jeweller wants to showcase the designs that are prepared only on order or to be ordered from another country on demand, they can use this platform to easily advertise those designs free of cost. The inputs for the requirements of the app have been collected from all the stakeholders through interviews and surveys. The app will be designed on Android studio and Firebase.

Keywords –Online jewelry shopping, mobile application, customers, jewelers.

Introduction

Shopping is indispensable and nowadays, shopping has become difficult due to the blowout of the Corona virus, so going for shopping is demanding at the present stage, so individuals will recourse to automated facilities that permit them to acclimatize to the existing conditions. From here I made the project idea. This is the clue of implementing the project to sell luxurious jewelry to every modern woman, so that every woman can get what she wants from distinctive jewelry and accessories. This app will provide Tammy jewelry. I made this application because shopping became difficult during this period, so people resort to buying from the Internet. As we know in the current situation, due to the spread of the disease, all markets have been closed and home isolation imposed, and because of the benefits that online shopping provides, such as saving time, effort and comfort, and it provides many options for purchase, offers, and more.

Methodology

Both the quantitative and qualitative methods have been used in this research work by the authors, to get the statistics of the related existing works. Online questionnaire as surveys were used to quantify the statistics and frame the objectives after analyzing the problem. The qualitative research method was used to study the technology related articles for this domain, and find out the problems in the existing works to make the state of the art solutions.

Literature review

We studied the online application available for Blue Nile. They sell and manufacture handmade jewelry and rings. The founder was Mark Vadon in 1999. They had an idea that there should be innovation in the design of jewelry and sale of diamonds. The design of this site delivers commitment rings and aids to ascertain and design the flawless pieces of jewelry for every special occasion. It delivers extravagance jewelry and tailored to customer budget. Every piece of jewelry is assured as it meets industry-leading criteria and less prices than other stores. Any customer can also demand their specific jewelry. The website also offers information to customers to

purchase diamonds and educational guides so that the customer can choose from the best in his requirement criteria.

Goldy store is a platform that compromises of the premium jewelry from superb gold and diamond items (gold, silver and diamonds). One of the gains of this app or website is that it comprises a range of diverse brands and jewelry stores. They provide jewelry for men, women, and children. The jewelry can also be re-saled on this application.

Lulia jewelry store is a brand that offers online sale and purchase of gold items. The goal of this store is to revolutionize the jewelry market in the Middle East countries and overseas through a exclusive shopping capability that allows customers to attain high quality jewelry at great values and designs and different forms suitable for all occasions. The store offers jewelry from other countries also. Lulia has made a brand name for itself and continues to enjoy the goodwill of its customers for a couple of years now.

Problem definition

The inability to go out for shopping during this period is the most important problem that people face in this period, as well as the problem of closing the gathering of markets from time to time in order to avoid the spread of the disease. As for the problem facing the markets, that there are not many types of jewelry in the market because of the inability to bring in a lot of products from abroad.

Questionnaire

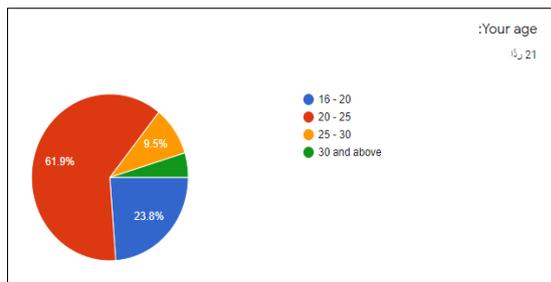


Figure 1 Q1 Results

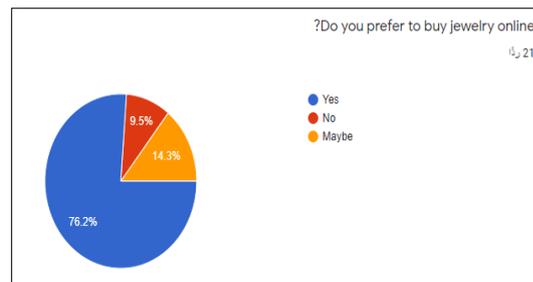


Figure 2 Q2 Results

- 61.9% of respondents belong to 20-25 age group. Whereas, 23.8% of the age group is 16- 20 years old. And 9.5% from 25 to 30 years. Moreover, there are no people from 30 and above.
- 76.2% of respondents desire to purchase jewelry online, maximum wish to buy online and the clue of the project is very positive.
- Most of the people expect the transactions should be faster.

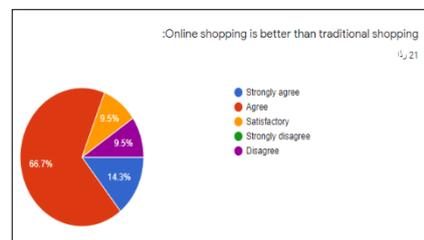
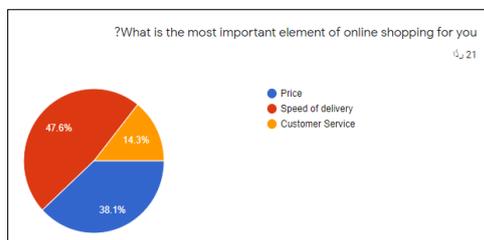


Figure4 Q4 results

Figure3 Q3 results

- 66.7% of the respondents agree that online shopping is superior than traditional shopping

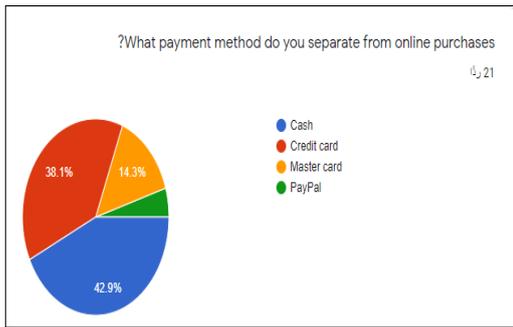


Figure 5 Q5 results

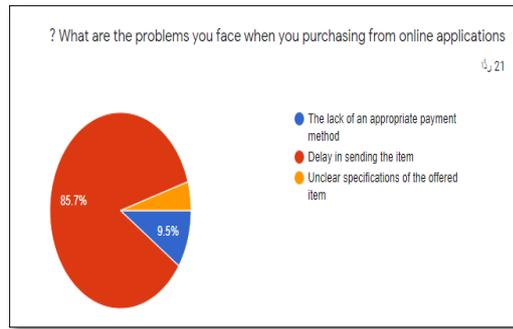


Figure 6 Q6 results

- From the subsequent chart, it was initiated that individuals wish to pay by Cash by 42.9%, the largest percentage. No one prefers to pay by PayPal. The top options you can create for in-app payments are Cash and credit card.
- From the resulting chart, it was established that the major difficulty individuals' face in online applications is the deferral in distribution of goods by 85.7%, which is the leading percentage. However, 9.5% have the difficulty of not partaking the precise payment method and this is the lowest. The strategy must be prepared to distribute the goods in a well-timed method.

Diagrams

Based on the analysis of the questionnaire, the design of the application was considered and the following illustrations are provided for the same:

Flow chart

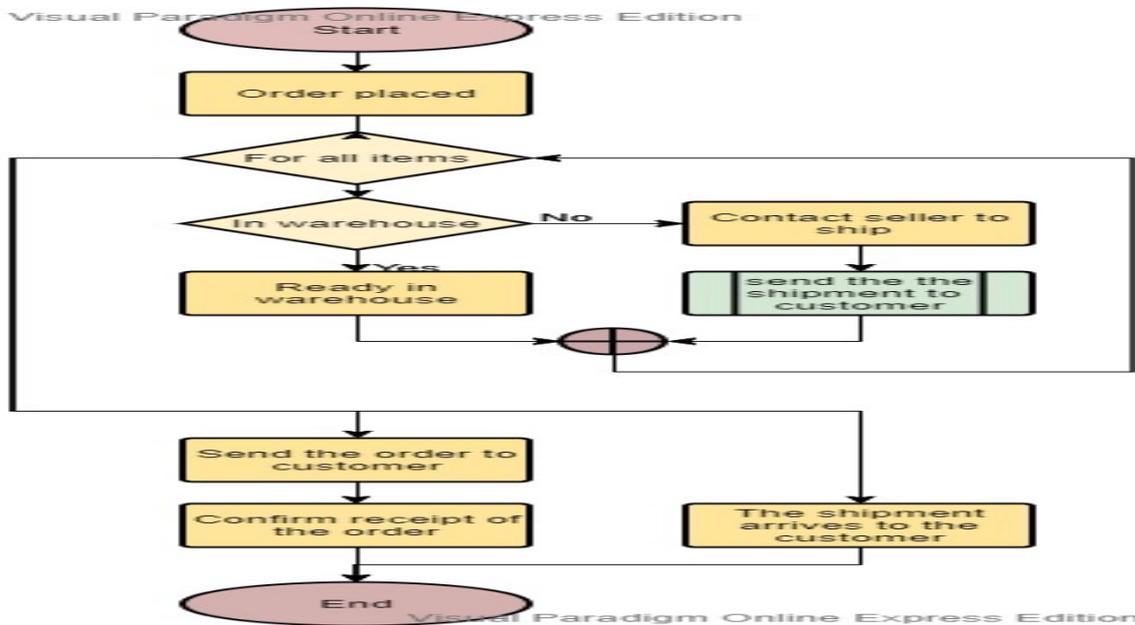


Figure 7 Flowchart

Sequence diagram

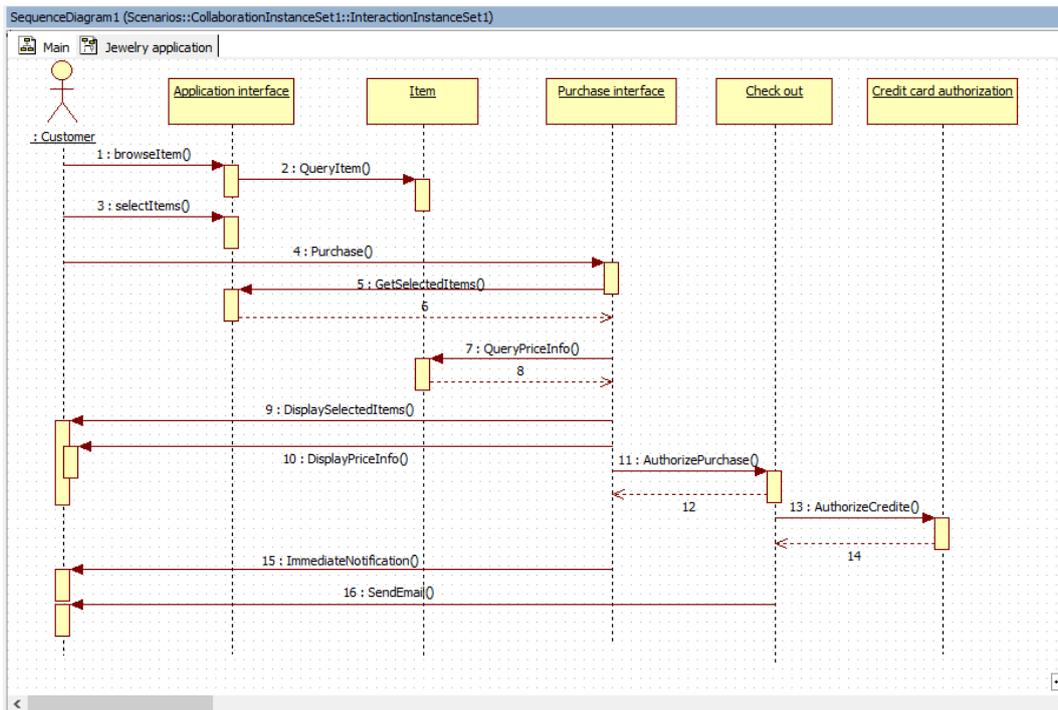


Figure 8 sequence Diagram

Use case diagram

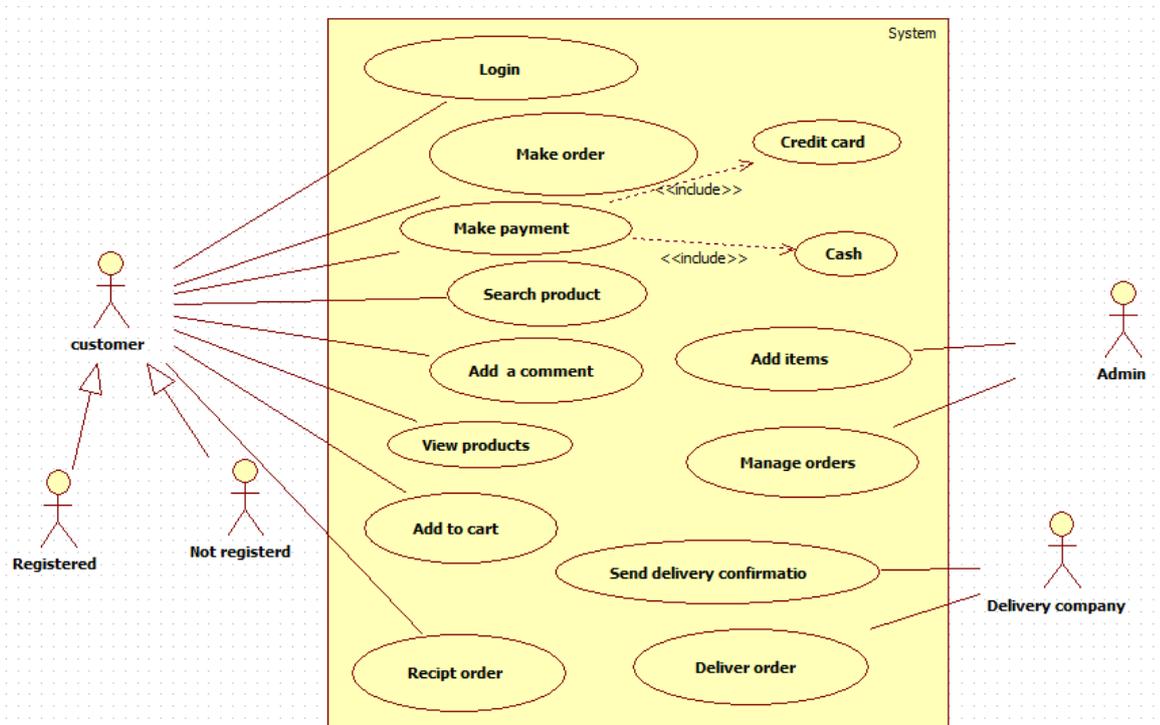


Figure 9 Use Case Diagram

Class diagram

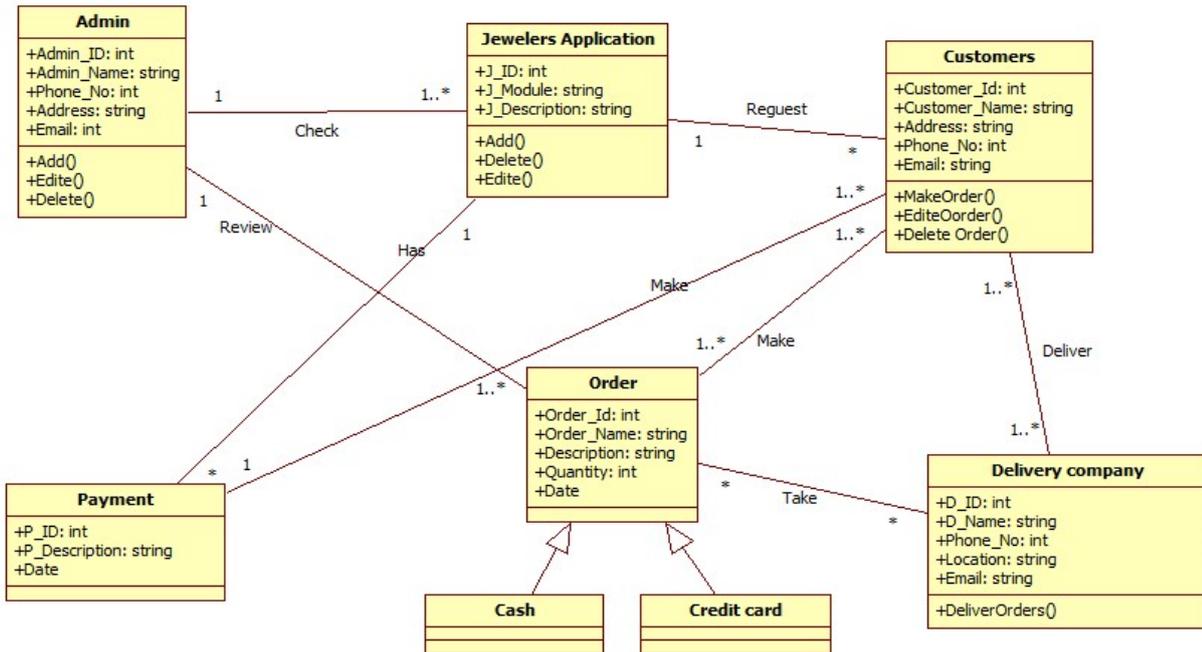


Figure 10 Class Diagram

Context diagram

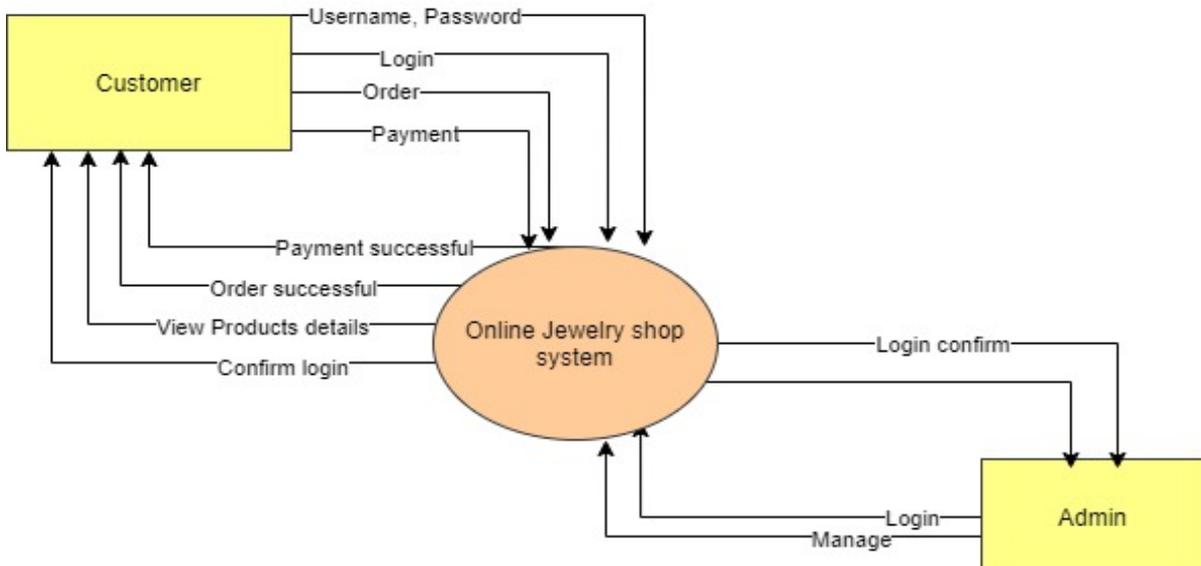


Figure 11 Context Diagram

DFD Level Zero Diagram

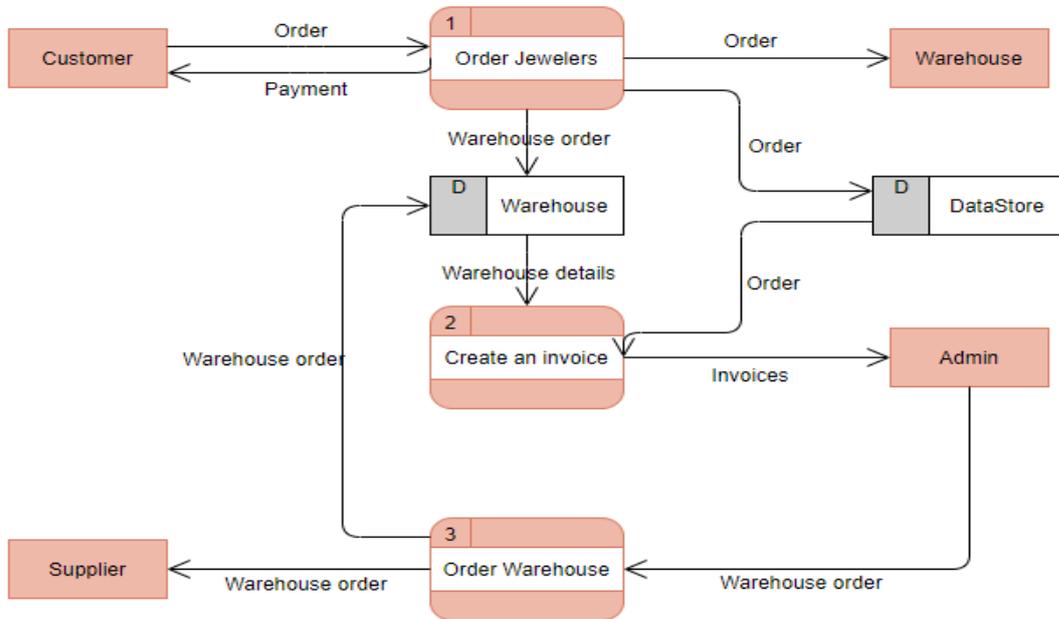


Figure 12 DFD level 0

Entity relationship diagram

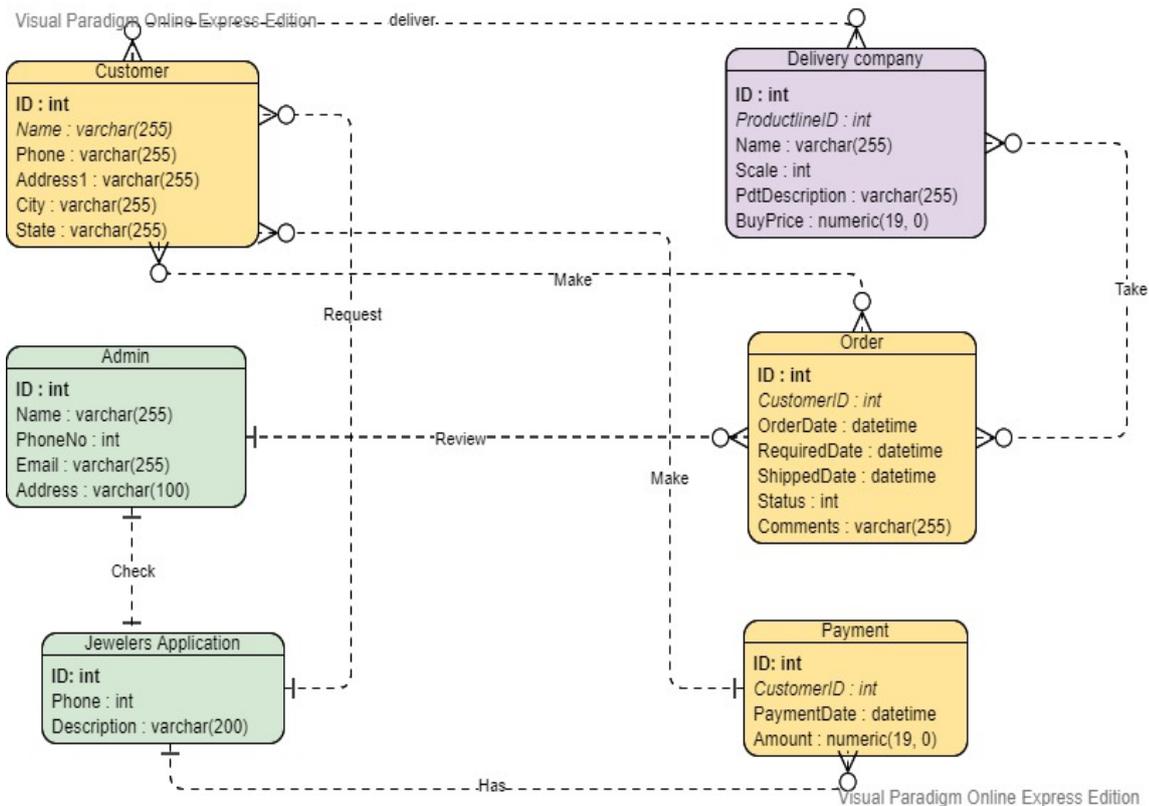


Figure 13 Entity Relationship Diagram

Result discussion:

An application for selling jewelry for smartphones through which elegant and luxurious jewelry is purchased from the Tami Jewels brand, and customers can purchase from the application and comment on the goods and express their opinion on it and the services provided by the application and can send gifts through the application as well as other services.

Conclusion:

In the end, this application is the perfect solution for shopping, especially for people who do not have time to go shopping in stores and search that takes a lot of time and effort as well as to compare prices, products and quality. In addition, the customer can review customer experiences and evaluate products. This makes the shopping experience a complete one.

Acknowledgement:

We would like to thank Tamy jewelers for having faith in us and entrusting us with this project. We would also like to thank the Department of Computing for giving us the chance to present the work done for this shop.

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