ANADOLU UNIVERSITY FACULTY OF ENGINEERING

DUYARLI OL

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A Bachelor of Science Project

Department of Computer Engineering

May 2017

DUYARLI OL

by

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Submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Engineering is approved by the following scientific committee members.

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ABSTRACT

In recent years, the use of computers, smart phones and many electronic devices

have increased because of rapid growth of technology. However, with the widespread

use of the internet, the numbers of e-commerce sites are increasing day by day. Users

can easily buy any product they want on the internet, and also sell products at more

affordable prices to increase shopping on e-commerce sites. In this era of consumption,

the number of costumers is increasing while individual borrowing is increasing at a

great pace. The increase in the incentives of state and banks to encourage buying and

spending rather than creating awareness and sensitivity to individuals. The main

purpose of the project is a web-awareness project that allows individuals who want to

make online purchases to take some basic information and complete a short test before

completing their purchases, allowing them to think about how much they need for their

products and what they need to buy.

Keywords: Online Shopping, Credit cards, Sensitivity, Web

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ÖZET

Son yıllarda teknolojinin büyük bir hızla gelişmesinden dolayı, bireylerin

bilgisayar, akıllı telefon ve birçok elektronik alet kullanımı artmıştır. Bununla beraber

internetin yaygınlaşmasıyla e-ticaret sitelerinin sayılarına her geçen gün kat ve kat

artmaktadır. Kullanıcıların istedikleri herhangi bir ürünü internet üzerinden kolay bir

şekilde alabilmeleri ve ayrıca firmaların ürünlerini daha uygun fiyatlara satmaları e-

ticaret sitelerinden alışverişi arttırmaktadır. Tüketim çağı dediğimiz bu çağda,

kullanıcıların alışveriş sayıları artar iken bireysel borçlanmaları da büyük bir hızda artış

göstermektedir. Devlet ve bankalar, bireyler üzerinde farkındalık ve duyarlılık

oluşturmak yerine satın almaya, harcama yapmaya teşvik etmeleri bu artışa da sebep

olmaktadır. Projemizin asıl amacı, online alışveris yapmak isteyen bireylerin

alışverişlerini tamamlamadan önce bazı temel bilgilerinin alınıp, kısa bir teste tabi

tutularak, ellerindeki bütçe ile alacak olduğu ürüne ne kadar ihtiyaçları olup

olmadıklarını düşünmelerini sağlayan ve tabiki de son kararı bireylerin kendisine

bırakan bir web duyarlılık projesi oluşturmaktır.

Anahtar Kelimeler: Online Alışveriş, Kredi Kartı, Duyarlılık, Web

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ACKNOWLEDGEMENT

Firstly, We would like to thank our thesis supervisor, Assoc. Prof. Dr. Özgür Yılmazel. The door to Assoc. Prof. Yılmazel office was always open whenever we ran into a trouble spot or had a question about our thesis.

Besides our advisor, we would like to thank the rest of our committee Lect. Emre Kaçmaz and Res. Asst. Ahmet Aydın for their support, helps and positive criticism about our project.

Finally, we must express our very profound gratitude to our Yıldız and Öztaban families and to our friends for providing us with unfailing support and continuous encouragement throughout our years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

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ABBREVIATIONS

AppApplicationDODuyarlı OlJSJavaScript

SQL Structured Query Language

1. INTRODUCTION

1.1 Project Title

DUYARLI OL

1.2 Group Members

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1.3 Project Motivation

The user will be redirected to our website before the user completes the exchange. Our system will want some information of its own from the user. The user will be thought for the second time about the product he/she will really need or not need.

1.4 Project Definition

Online shopping has increased with the increase in the use of credit cards in recent years. This has led to an increase in the individual debts of individuals. Our system is a susceptibility project intended to make people think twice about shopping.

1.5 Scope of Project

Anyone who makes an online purchase can go to our test and evaluate the price for that shopping.

1.6 Gantt Chart

| | ® | Ad | Süre | Başlat | Bitirme | Önceki | Kaynak Adları |
|----|----------|----------------------------|-----------|------------------|------------------|--------|---------------|
| 1 | | Begin Project | 0 günler? | 06.02.2017 08:00 | 06.02.2017 08:00 | | |
| 2 | | Determine the group me | 0 günler? | 06.02.2017 08:00 | 06.02.2017 08:00 | | |
| 3 | | What is the project | 3 günler? | 06.02.2017 08:00 | 08.02.2017 17:00 | | |
| 4 | 8 | Making requirement ana | 1 gün? | 09.02.2017 08:00 | 09.02.2017 17:00 | 3 | |
| 5 | 8 | Determine the requirem | 1 gün? | 09.02.2017 08:00 | 09.02.2017 17:00 | 3 | |
| 6 | 8 | Design Web Site Phase | 0 günler? | 09.02.2017 08:00 | 09.02.2017 08:00 | | |
| 7 | 8 | draw how to seem web: | 2 günler | 09.02.2017 08:00 | 10.02.2017 17:00 | | |
| 8 | 8 | implement the codes for | 20 günler | 13.02.2017 08:00 | 10.03.2017 17:00 | 7 | |
| 9 | 8 | execute the codes and t | 2 günler | 13.03.2017 08:00 | 14.03.2017 17:00 | 8 | |
| 10 | 8 | eveluate all test and risk | 2 günler | 15.03.2017 08:00 | 16.03.2017 17:00 | 9 | |
| 11 | 8 | Design Database Phase | 0 günler | 16.03.2017 08:00 | 16.03.2017 08:00 | | |
| 12 | 8 | making meet which data | 2 günler | 16.03.2017 08:00 | 17.03.2017 17:00 | | |
| 13 | 8 | drow relationships beet | 1 gün? | 20.03.2017 08:00 | 20.03.2017 17:00 | 12 | |
| 14 | 8 | connect to the azure pla | 1 gün? | 20.03.2017 08:00 | 20.03.2017 17:00 | 12 | |
| 15 | 8 | coding sql commands | 2 günler | 21.03.2017 08:00 | 22.03.2017 17:00 | 14 | |
| 16 | 8 | write connection codes | 10 günler | 23.03.2017 08:00 | 05.04.2017 17:00 | 15 | |
| 17 | 8 | evaluate all situations ar | 5 günler | 06.04.2017 08:00 | 12.04.2017 17:00 | 16 | |
| 18 | 8 | chrome extension phase | 0 günler | 12.04.2017 07:00 | 12.04.2017 08:00 | | |
| 19 | 8 | coding chrome extension | 10 günler | 12.04.2017 07:00 | 25.04.2017 17:00 | | |
| 20 | 8 | evaluate all codes | 10 günler | 26.04.2017 08:00 | 09.05.2017 17:00 | 19 | |
| 21 | 8 | testing for execution | 4 günler | 10.05.2017 08:00 | 15.05.2017 17:00 | 20 | |
| 22 | 8 | report | 1 gün? | 16.05.2017 08:00 | 16.05.2017 17:00 | 21 | |
| | | | | | | | |
| | | | | | | | |

Figure 1.1. Table Visualization of Project Process

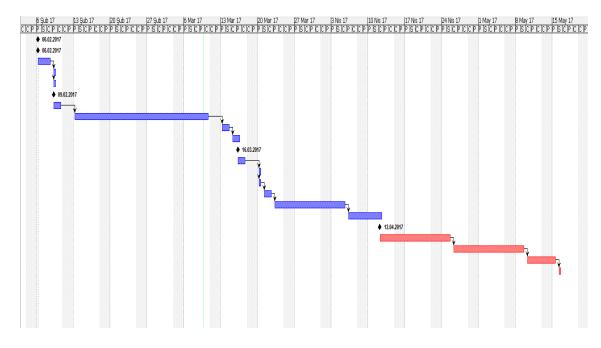


Figure 1.2. Chart Visualization of Project Process

2. PLATFORM AND TECHNOLOGIES TO BE USED

2.1 Polymer JS[1]

Polymer is an open-source JavaScript library for building web applications using web components. The library is being developed by Google developers and contributors on Github. Modern design principles are implemented as a separate project using Google's Material Design principles.

Polymer provides a number of features over vanilla web components:

- Simplified way of creating custom elements
- Both One-way and Two-way data binding
- Computed properties
- Conditional and repeat templates
- Gesture events
- Library of Elements

2.2 Chrome Extension[2]

Google Chrome Extensions are browser extensions that modify the Google Chrome browser. These extensions are written using web technologies like HTML, JavaScript, and CSS. Google Chrome Extensions are downloadable through the Chrome Web Store (formerly the Google Chrome Extensions Gallery). By February 2010, over 2,200 extensions had been published by developers. All users with a Google Account are able to add extensions after developing them.

2.3 AZURE[3]

Microsoft Azure is a growing collection of integrated cloud services that developers and IT professionals use to build, deploy and manage applications through global network of datacenters. With Azure, user get the freedom to build and deploy wherever they want using the tools, applications and frameworks of their choice.

2.4 JavaScript[4]

JavaScript is a high-level, dynamic, untyped and interpreted programming language. It has been standardized in the ECMAScript language specification. Alongside HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content production; the majority of websites employ it, and all modern Web browsers support it without the need for plug-ins. JavaScript is prototype-based with first class functions, making it a multi-parading language, supporting, object-oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

2.5 Microsoft SQL Server[5]

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet).

2.6 HTML[6]

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a webserver or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

2.7 ASP.NET[7]

ASP.NET is an open-source server-side web application framework designed for web development to produce dynamic web pages. It was developed by Microsoft to allow programmers to build dynamic web sites, web applications and web services. It was first released in January 2002 with version 1.0 of the .NET Framework, and is the successor to Microsoft's Active Server Pages (ASP) technology. ASP.NET is built on the Common Language Runtime (CLR), allowing programmers to write ASP.NET code using any supported .NET language. The ASP.NET SOAP extension framework allows ASP.NET components to process SOAP messages.

ASP.NET is in the process of being re-implemented as a modern and modular web framework, together with other frameworks like Entity Framework. The new framework will make use of the new open-source .NET Compiler Platform (code-name "Roslyn") and be cross platform. ASP.NET MVC, ASP.NET Web API, and ASP.NET Web Pages (a platform using only Razor pages) will merge into a unified MVC 6. The project is called ASP.NET Core.

2.8 CSS[8]

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

3. DESIGN

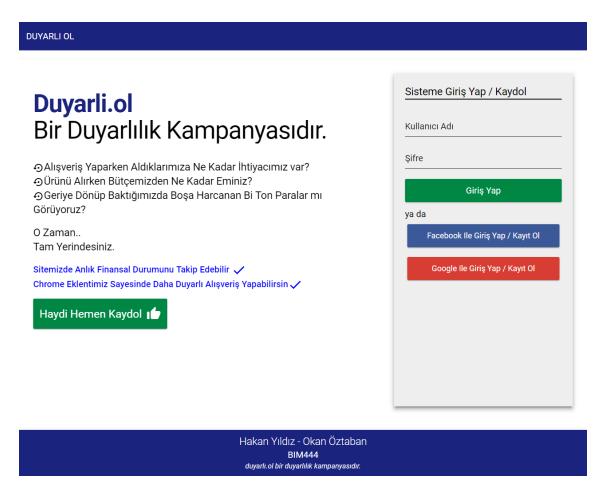


Figure 3.1. Login Screen

When the user access the web app in the first time, user should be registered this system via Facebook or Gmail login. After the authentication completed, system wants from user to create username and password for accessing the system. User can reach the Duyarlı Ol Homepage by completing the required procedures.

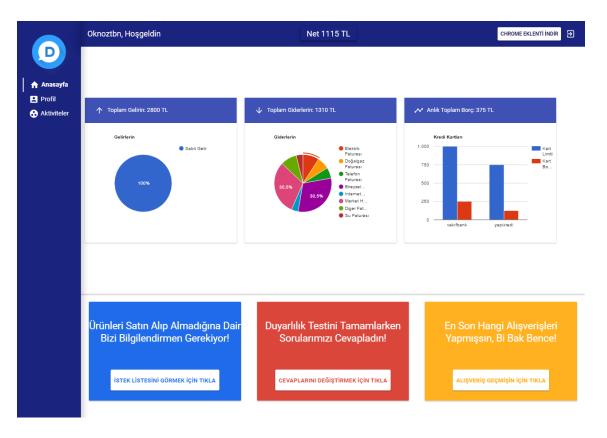


Figure 3.2. Homepage

Users can see total income, outcome, instant total debt. Also, user gets information as a graphically. User should give information about last shopping for taking or not taking last product. If User don't do the sensivity thesis before completing the shopping, they can do it on homepage. Also, If User doesn't remember product which buy on the last shopping, they can learn easily. Questions part will be active after user complete question part in the shopping process. If the user has already answered question, user can reach questions part above and may change own answers.

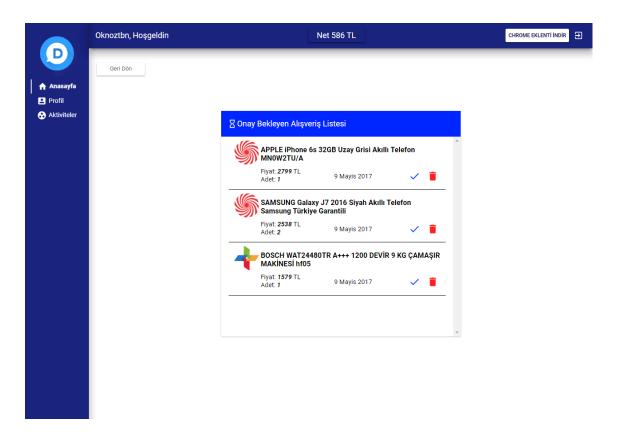


Figure 3.3. List of Shopping

Users can reach the list of the shopping. This list contains items which have not approved. User has got two actions for each item. If the user want to announce to not buy any item in the list, user may click trash button related to item and then it will be deleted from list. In the other way, If user wants to announce to buy any item in the list, user should click the tick button. After the click event, popup will be appeared on the screen and our system will asks to user which credit card to choose to complete the transaction. If the selected card has a sufficient limit, transaction will be completed, otherwise our system wants to user to select another card for this transaction.

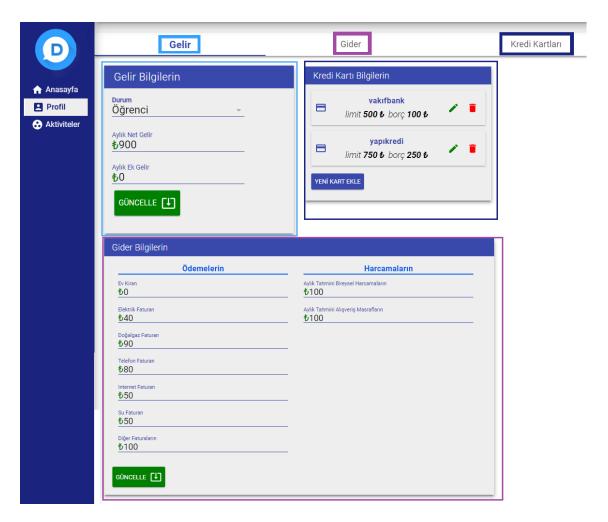


Figure 3.4. Profile

Profile part has got three parts about user's information. User can access this part by clicking 'Profil' button on the left navigation bar. When the user accesses the page, the income page appears firstly. In the income page, user can monitorize details of own instant income. If the user wants to update data of income, user can edit these incomes, it is enough to click the 'Güncelle' button. If the user wants to access the details of outcome and credit cards, user should click the navigation button in the top of current page. Processes of outcome and credit card are the same as income part. In addition to this, in the credit card part, user can delete any active credit card and also may add new credit card. All of these actions work asynchronously. When the new data updates, the graphical appearances of user's information are automatically updated.

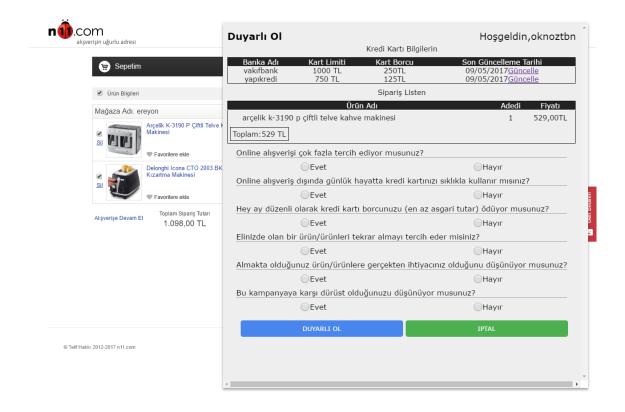


Figure 3.5. Extension of Duyarlı Ol on Shopping Website

Firstly, user must install 'Duyarlı Ol' chrome extension because the our system runs correctly. User can download extension by clicking 'Chrome Eklentisini İndir' button where is located in the upper right corner of web app. After the installation, extension works on e-commercial webpages without any requirements.

When user click 'Devam' button in **n11.com** 'Sepetim' part, extension will be appeared on the screen. System will ask user to answer questions in the first time. If user has already completed this part at least one, our system will not ask again to answer the specific questions. User may change answers of questions in the homepage of Duyarlı Ol web app whenever they want. User is directed before they completed the shopping. On the picture, users can see credit cards information and product that they want to buy.

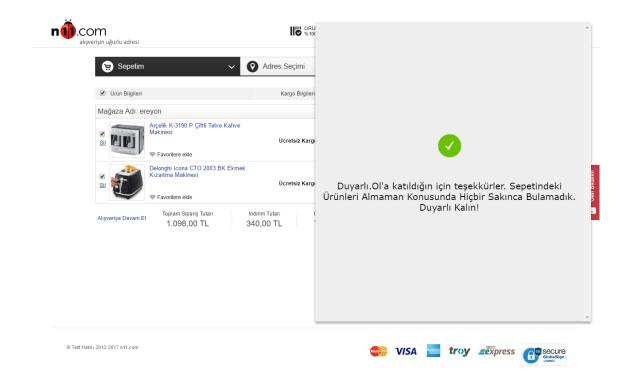


Figure 3.6. Extension of Duyarlı Ol with n11.com

If the user clicks the 'Duyarlı Ol' button which is generated by extension on the screen, the testing part will starts. Our application calculates the information that the user has entered and returns a result as to whether the product it received is suitable. In the picture above, the situation after the calculation is shown. It is stated that there is no inconvenience for the user to make purchases because the shopping situation of user is suitable.

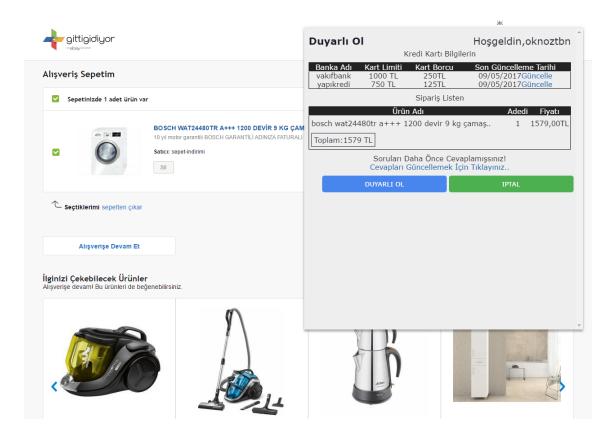


Figure 3.7. Extension of Duyarlı Ol with gittigidiyor.com

Firstly, user must install 'Duyarlı Ol' chrome extension because the our system runs correctly. User can download extension by clicking 'Chrome Eklentisini İndir' button where is located in the upper right corner of web app. After the installation, extension works on e-commercial webpages without any requirements.

When user clicks 'Satın Al' button in **gittigidiyor.com** 'Alışveriş Sepetim' part, extension will be appeared on the screen. User is directed before they completed the shopping. On the screenshot, users can see credit cards information and product that they want to buy. Also, because the user has answered our questions previously, there is no reason to have our questions displayed on the screen again. It works on **gittigidiyor.com** shopping site.

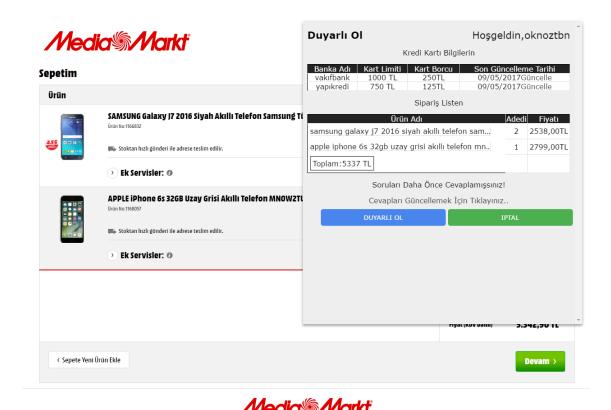


Figure 3.8. Extension of Duyarlı Ol with mediamarkt.com.tr

Firstly, user must install 'Duyarlı Ol' chrome extension because the our system runs correctly. User can download extension by clicking 'Chrome Eklentisini İndir' button where is located in the upper right corner of web app. After the installation, extension works on e-commercial webpages without any requirements.

When user click 'Tamamla' button in **mediamarkt.com.tr** 'Sepetim' part, extension will be appeared on the screen. User is directed before they completed the shopping. On the screenshot, users can see credit cards information and product that they want to buy. Also, because the user has answered our questions previously, there is no reason to have our questions displayed on the screen again. It works on **mediamarkt.com.tr** shopping site.

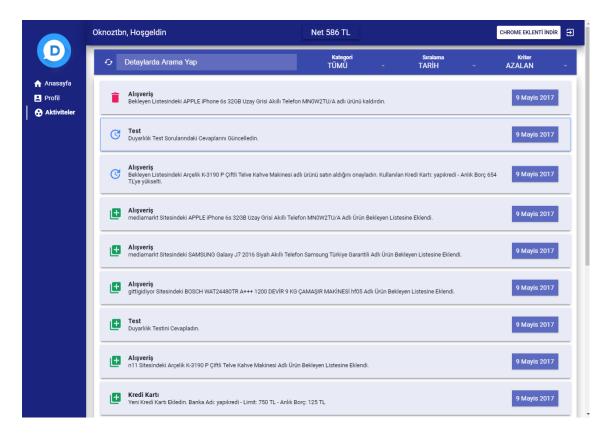


Figure 3.9. Event in Web App

User can access this part by clicking 'Aktiviteler' button on the left navigation bar. When the user accesses the page, the list which includes all records of user is made appears. Each list item includes interaction icons, title and description of process and processing date. User can make a search over the list items. User may display records according to categories, rankings and criteria using selection tools in the toolbar.

4. CONCLUSIONS

At the end of the project, we were able to show how much the user needed to shop in his own budget. The user had seen that the product he had bought with the amount of budget he had was in line with his budget. We made a second thought about buying products while shopping for individuals. We did our campaign of sensitivity. **Duyarlı Ol** a sensitivity campaign.

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