**MARMARA UNIVERSITY**

**FACULTY OF ENGINEERING**



**DESIGN AND PROGRAM A HEALTH NEWS RSS AGGREGATOR**

Atilla Gündoğan

**GRADUATION PROJECT REPORT**

Department of Electrical and Electronics Engineering

**Supervisor**

Asst. Prof. Salih Bayar ISTANBUL, 2022

**MARMARA UNIVERSITY**

**FACULTY OF ENGINEERING**

**DESIGN AND PROGRAM A HEALTH NEWS RSS AGGREGATOR**

**by**

**Atilla Gündoğan**

**June 18, 2022, Istanbul**

**SUMBITTED TO THE DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING IN**

**PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE**

**AT**

**MARMARA UNIVERSITY**

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Signature of Author(s)

Department of Electrical and Electronics Engineering

Certified By

Project Supervisor, Department of Electrical and Electronics Engineering

Accepted By

Head of the Department of Electrical and Electronics Engineering

# ACKNOWLEDGEMENTS

I would like to thank our beloved teacher Asst. Prof. Salih Bayar for his valuable support and advice on the project, Design and Program a Health News RSS Aggregator, both for guidance and moral support.

**June, 2022**

**Atilla Gündoğan**

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# 

# ABSTRACT

RSS Readers was a kind of social media in the 90s before Facebook and its competitors came along. Today RSS finds its place in the hands of avid readers who wants to keep up with the latest news and innovations. Many websites offer this service but not many do enjoy their benefits. For simplification and greater integration, we gather data from RSS XML files provided by publishers and push them to a SQL database. After pushing the data, we can pull them directly or query them to select one or more specific data with requested features. Once we get our requested data, we can create an algorithm and insert them into a Machine Learning application. We can also integrate the data into an existing application creating news panel. Also, an important note, since these are copyrighted work and shares to users consumption free of charge, we can't manipulate the data inside and add our own data. We can share or use it while giving references.

# LIST OF SYMBOLS

## SQL Special Character Escape Sequences

In SQL Databases like MariaDB or MySQL, we may need to query some special characters. Here is a list of SQL special character escape sequences.

**\0 :** An ASCII NUL (0x00)

**\n :** A newline

**\r :** A carriage return

**\t :** A tab

**\Z :** Control-Z

**\' :** A single quote (')

**\" :** A double quote (")

**\b :** A backspace

**\\ :** A backslash (\)

**\% :** A % character

**\\_ :** A \_ character

## ASCII Characters

ASCII is the first character set that ever used between computers over the internet and it was created at 1963 by ANSI (American National Standards Institute). Latest HTML (HTML5) character set (UTF-8) is built on ASCII.

**&#32;** → Space ( )

**&#33;** → Exclamation mark (!)

**&#34;** → Quotation mark (")

**&#35;** → Number sign (#)

**&#36;** → Dollar sign ($)

**&#37;** → Percent sign (%)

**&#38;** → Ampersand (&)

**&#39;** → Apostrophe (')

**&#40;** → Left Parenthesis [(]

**&#41;** → Right Parenthesis [)]

**&#42;** → Asterisk (\*)

**&#43;** → Plus sign (+)

**&#44;** → Comma (,)

**&#45;** → Hyphen (-)

**&#46;** → Period (.)

**&#47;** → Slash (/)

**&#48;** → Digit 0 (0)

**&#49;** → Digit 1 (1)

**&#50;** → Digit 2 (2)

**&#51;** → Digit 3 (3)

**&#52;** → Digit 4 (4)

**&#53;** → Digit 5 (5)

**&#54;** → Digit 6 (6)

**&#55;** → Digit 7 (7)

**&#56;** → Digit 8 (8)

**&#57;** → Digit 9 (9)

**&#58;** → Colon (:)

**&#59;** → Semicolon (;)

**&#60;** → Less-than (<)

**&#61;** → Equals sign (=)

**&#62;** → Greater than (>)

**&#63;** → Question mark (?)

**&#64;** → At sign (@)

**&#91;** → Left square bracket ([)

**&#92;** → Backslash (\)

**&#93;** → Right square bracket (])

**&#94;** → Caret (^)

**&#95;** → Underscore (\_)

**&#96;** → Grave accent (`)

**&#123;** → Left curly brace ({)

**&#124;** → Vertical bar (|)

**&#125;** → Right curly brace (})

**&#126;** → Tilde (~)

# ABBREVIATIONS

**RSS:** Really Simple Syndication

**XML:** eXtensible Markup Language

**VPS:** Virtual Private Server

**VDS:** Virtual Dedicated Server

**VM**: Virtual Machine

**PHP:** Hypertext Pre-processor

**SQL:** Structured Query Language

**NOSQL:** Not Only Structured Query Language

**CPU:** Central Processing Unit

**RAM:** Random Access Memory

**XAMPP:** Cross-platform, Apache, MySQL, PHP, and Perl

**IaaS:** Infrastructure as a Service

**PaaS:** Platform as a Service

**SaaS:** Software as a Service

**ASCII:** American Standard Code for Information Interchange

**CLI:** Command Line Interface

**GB:** Giga Bytes

**GUI:** Graphical User Interface

**MHz:** Mega Hertz

**SEQUEL:** Structured English Query Language

**TCP:** Transport Control Protocol

**WWW:** World Wide Web

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# OPERATORS AND RESERVED WORDS

## PHP

We perform operations on variables and their values with operators. They are grouped as below.

### PHP Arithmetic Operators

Table 1 PHP Arithmetic Operators

|  |  |  |
| --- | --- | --- |
| Operator | Name | Example |
| - | Subtraction | $x - $y |
| + | Addition | $x + $y |
| \* | Multiplication | $x \* $y |
| \*\* | Exponentiation | $x \*\* $y |
| / | Division | $x / $y |
| % | Modulus | $x % $y |

### PHP Assignment Operators

Table 2 PHP Assignment Operators

|  |  |
| --- | --- |
| Assignment | Equal To |
| x = y | x = y |
| x -= y | x = x - y |
| x += y | x = x + y |
| x \*= y | x = x \* y |
| x %= y | x = x % y |
| x /= y | x = x / y |

### PHP Increment / Decrement Operators

Table 4 PHP Increment and Decrement Operators

|  |  |  |
| --- | --- | --- |
| Operator | Name | Description |
| ++$x | Pre-increment | Increments first, then returns $x |
| --$x | Pre-decrement | Decrements first, then returns $x |
| $x++ | Post-increment | Returns $x first, then increments $x |
| $x-- | Post-decrement | Returns $x first, then decrements $x |

### PHP Comparison Operators

Table 3 PHP Comparison Operators

|  |  |  |
| --- | --- | --- |
| Operator | Name | Example |
| == | Equal | $x == $y |
| === | Identical | $x === $y |
| != | Not equal | $x != $y |
| !== | Not identical | $x !== $y |
| < | Less than | $x < $y |
| > | Greater than | $x > $y |
| <= | Less or equal to | $x <= $y |
| >= | Greater or equal to | $x >= $y |

### PHP Logical Operators

Table 5 PHP Logical Operators

|  |  |  |
| --- | --- | --- |
| Operator | Name | Example |
| and | And | $x and $y |
| && | And | $x && $y |
| or | Or | $x or $y |
| || | Or | $x || $y |
| xor | Xor | $x xor $y |
| ! | Not | !$x |

### PHP String Operators

Table 6 PHP String Operators

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Name | Example | Explanation |
| . | Concatenation | $x . $y | Add $x and $y |
| .= | Concatenation assignment | $x .= $y | Append $y after $tx |

### PHP Array Operators

Table 7 PHP Array Operators

|  |  |  |
| --- | --- | --- |
| Operator | Name | Example |
| + | Union | $x + $y |
| == | Equality | $x == $y |
| != | Inequality | $x != $y |
| <> | Inequality | $x <> $y |
| === | Identity | $x === $y |
| !== | Non-identity | $x !== $y |

## SQL

This part contains SQL reserved words (keywords) which can be used both in MySQL and MariaDB. Reserved keywords have a certain functionality and should not be used to declare variables, tables, or columns.

### SQL Keywords

Table 8 SQL Keywords

|  |  |  |  |
| --- | --- | --- | --- |
| ADD | ADD CONSTRAINT | ALL | ALTER |
| ALTER COLUMN | ALTER TABLE | AND | ANY |
| AS | ASC | WHERE | BETWEEN |
| CASE | CHECK | COLUMN | CONSTRAINT |
| CREATE | CREATE PROCEDURE | CREATE INDEX | VALUES |
| CREATE TABLE | CREATE DATABASE | VIEW | CREATE VIEW |
| DATABASE | DEFAULT | DELETE | DESC |
| DISTINCT | DROP | DROP COLUMN | DROP CONSTRAINT |
| DROP DATABASE | DROP DEFAULT | DROP INDEX | DROP TABLE |
| DROP VIEW | EXEC | EXISTS | FOREIGN KEY |
| FROM | FULL OUTER JOIN | GROUP BY | HAVING |
| IN | INDEX | INNER JOIN | INSERT INTO |
| INSERT INTO SELECT | IS NULL | IS NOT NULL | JOIN |
| LEFT JOIN | LIKE | LIMIT | NOT |
| NOT NULL | OR | ORDER BY | OUTER JOIN |
| PRIMARY KEY | PROCEDURE | RIGHT JOIN | ROWNUM |
| SELECT | SELECT DISTINCT | SELECT INTO | SELECT TOP |
| SET | TABLE | TOP | TRUNCATE TABLE |
| UNION | UNION ALL | UNIQUE | UPDATE |

# INTRODUCTION

Today, readers find themself in a huge pile of information. There is just simply too many publishers, news and researches to keep up with. RSS feeds helped those readers until the 90s but then the technology started to lose its place and now the average person doesn't even know what an RSS feed is. Even though many websites, publishers, blogs and even forum sites offer this service there is not an intuitive way to use this information. In this project we gathered data from RSS XML files from publishers and inserted into a SQL Database so we can use it in other applications and projects. After inserting the data, we can pull them directly or query them to select one or more specific data with requested features.

## Thesis Content

The content should include the following sections.

BU SECTIONDAN ITIBAREN DUZENLE

# RESEARCH OBJECTIVE

Although having too much information doesn't sound bad at all it can have a negative impact. Having too much unorganized information can make the desired info buried under unrelated topics and researches. But even too much organized information can cause problems. One of those problems is information overload. Information overload is probably something you have felt before after hours of researching the web and you realize that there is too much data floating around and you can no longer make decisions about the topic. To prevent this is in this project we only gathered data from Turkish Heath News Publishers. We defined 6 categories including Title, Link, Media, Meta Description, Content and Publication Date. After inserting the data into a database, we can search and filter the data based on containing keywords in the content, name of the publisher, publication date, title, and content itself. Also, only the data in the form of RSS is not helpful. We need an RSS Reader or an RSS Aggregator. The RSS data is in XML Form, and it is hard to read and not intuitive enough for the public. With the help of PHP, we will also display the database content in a web page, that will make it easier to read the data without full permission access to the database itself.

# RELATED WORKS

There is a few closed-source RSS Aggregators like Feedly and Inoreader which you can't run it self-hosted. And then there is NewsBlur, the biggest open-source RSS Reader with a plenty of features. But you must run it a dedicated server alongside Docker. Because you will need a dedicated server which may cost a lot and may add up with the number of publishers and data queries. Also, the code base is very large and thus it is hard to understand without a long read into the documentation. With the scripts in this project, you can run it cost-free alongside your website or on a very cheap website hosting.

# DESIGN

## Realistic constraints and conditions

Since the RSS data contains copyrighted work we can't edit its content. We can only use it for ourselves or share it while giving credits to the authors and the publisher.

## Cost of the design

Cost of implementing the codes alongside a website installation with an admin panel installation is free. If there is no hosting at hand you can either purchase a cheap web hosting or host the scripts on a personal computer with XAMMP.

## Development Standards

While developing an app or a program we must follow the Programming Language's Syntax, requirements, and standards. Since we only used PHP in this project, we must use it accordingly in an intended way and syntax.

Standards for PHP: <https://www.php-fig.org/psr/>

Also their is industry standards of software development.

Standards for software from American National Standards Institute: <https://webstore.ansi.org/industry/software>

Standards for SQL Database:

<https://webstore.ansi.org/industry/software/technology-languages/SQL>

## Details of the design

The scripts work under 7 main folders. They communicate with require tags. There are 36 PHP files in total, and they all help the project work as intended.

Graphical user interface, application

Description automatically generated

# METHODS

Design (implementation/simulation studies), The experimental setups/the algorithms/the HW designs must be mentioned in detail. The logic behind the study must be explained.

I used GitHub to save and track my progress while I developed new features.

For development purposes I used XAMPP to run Apache, MySQL and phpMyAdmin locally.

Apache is the most used free and open-source webserver software that allows users to deploy their websites on the internet.

I used Visual Studio Code through the entire development process. It is a free and open-source powerful IDE from Microsoft.

PHP stands for Hypertext Preprocessor. PHP can generate dynamic page content, create, open, read, write, and delete files on the server.

MySQL is a relational database which we used to push or insert our data into. We can create databases, create tables into those databases and execute read write operations. We can see our database with the help of phpMyAdmin. Below there is the screenshot of our database configuration.

## TECHNOLOGIES USED

# INTRODUCTION TO RSS

In this project we gather resources through RSS feeds. RSS feeds are used to distribute latest web content from one or more website (source) to the end users (client - receiver). End users can read the data contents with an RSS Reader or an Aggregator.

* Abbreviation of RSS is Really Simple Syndication.
* RSS can be called as a News feed or RSS feed.
* RSS allows fast searching / viewing of latest news and articles without bloat and make it able to gather all contents in on place organized under categories or folders.
* RSS does not follow a guideline and every web publisher can create their non-standard tags.
* It makes it easy to share and display content and data about the content.
* RSS can be configured to update automatically.
* RSS can ben personalized.
* RSS is written/shared is XML format.
* RSS data is small in size and loads fast.
* RSS is read through aggregators.
* RSS aggregator is a website or a program that collects, sorts out and display RSS feeds.

## Why use RSS?

RSS was designed to display specific data. Without RSS, readers will be required to check every website that they want to keep up with. This would consume a lot of time. RSS feeds bring the latest content in a single place so that the consumers (readers) can check the resources faster.

Because RSS data is small in size and loads fast compared to other solutions it can be used with portable gadgets like smart phones and tablets.

## Who Should use RSS?

RSS can be used by anyone especially for the avid readers who constantly want to stay up to date with the latest news. RSS used frequently used in News sites, Calendars, Companies, and even announcing site changes. Every website that updates frequently or posts new content regularly needs an RSS feed.

Generally;

For News sites the XML file contains data like content title, date of publication, description, and content itself.

For Calendars the XML file contains data like upcoming events, holidays, birthdays etc.

For Companies the XML file contains data like news, articles, and products.

For site changes the XML file contains updates and changes of pages.

## Benefits of RSS

There is a lot of benefits of using RSS. Some examples are given below.

1. You choose your news and articles you want to receive

As the benefits of RSS, you can control the publications you receive, check the Informations that interests you and are related to your researches.

1. You can remove undesirable information and unfollow feeds

You are able the separate information that you desire from others that can be classified as spam or ads if you prefer to use RSS.

1. You can increase your website's traffic if you create an RSS feed

If you implement an RSS feed to your website, you can create and manage your own channels and share it to the rest of the world.

## RSS Standards

Unfortunately, there are no official standards for RSS feeds. About half of the feeds use RSS version 0.91. About a quarter of feed use RSS 1.0 and the rest is split between RSS 2.0 and RSS 0.9x versions.

## How RSS Works

RSS is used to share content between distributors and consumers. You can add RSS feed link to services called RSS aggregators. You can even register your feed with them to automate the process.

Below you will find a typical RSS feed in block diagram.

Diagram

Description automatically generated

Figure 1 Diagram of an example RSS feed

Every tag opened must be closed at the end of the part. Inside the tags the content follows. The tag can contain attributes.

Text, letter

Description automatically generated

Figure 2 Content of an example RSS feed

RSS document file must end with .xml extension. Once uploaded to a server you can view it in the browser as plain text or use an RSS aggregator. You can register your feed with services like Feedly so that they index your feed periodically.

If you don't use an aggregator the XML file will the displayed in plain text in a browser. Once displayed in the browser, a typical RSS feed will look like figure below.

Text

Description automatically generated

# WHAT IS XML?

Text, timeline

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Abbreviation XML stands for eXtensible Markup Language. XML was first used in 1998 and it was designed to store and transfer data across the internet. It is designed to be both human and machine readable. It is widely used in IT and many Internet services across the world. If facilitates the distribution of data over the World Wide Web. It is software and hardware independent so it can be utilized across devices and platform.

Some important bullet points;

* XML is a markup language such as HTML.
* XML was designed to store and transfer data over the WWW.
* XML content is self-descriptive and easy to understand.
* XML is a W3C Recommendation.
* XML became a W3C Recommendation in 1998.
* XML codes does not execute, doesn’t do anything except containing data.
* XML is transferred over TCP protocol.
* XML file may contain sender, receiver information.
* XML file may have a heading and a content body.
* XML is just a form of data that is enclosed by tags.

## The Difference Between XML and HTML

XML and HTML were designed with different goals:

XML was designed to carry data - with focus on what data is

HTML was designed to display data - with focus on how data looks

XML tags are not predefined like HTML tags are

XML Does Not Use Predefined Tags

The XML language has no predefined tags.

The tags in the example above (like <to> and <from>) are not defined in any XML standard. These tags are "invented" by the author of the XML document.

HTML works with predefined tags like <p>, <h1>, <table>, etc.

With XML, the author must define both the tags and the document structure.

XML is Extensible

Most XML applications will work as expected even if new data is added (or removed).

Imagine an application designed to display the original version of note.xml (<to> <from> <heading> <body>).

Then imagine a newer version of note.xml with added <date> and <hour> elements, and a removed <heading>.

The way XML is constructed, older version of the application can still work:

XML Simplifies Things

XML simplifies data sharing

XML simplifies data transport

XML simplifies platform changes

XML simplifies data availability

Many computer systems contain data in incompatible formats. Exchanging data between incompatible systems (or upgraded systems) is a time-consuming task for web developers. Large amounts of data must be converted, and incompatible data is often lost.

XML stores data in plain text format. This provides a software- and hardware-independent way of storing, transporting, and sharing data.

XML also makes it easier to expand or upgrade to new operating systems, new applications, or new browsers, without losing data.

With XML, data can be available to all kinds of "reading machines" like people, computers, voice machines, news feeds, etc.

# GITHUB

GitHub is a code hosting platform for collaboration and version control.

GitHub lets you (and others) work together on projects.

GitHub essentials are:

Repositories

Branches

Commits

Pull Requests

Git (the version control software GitHub is built on)

Repository

A GitHub repository can be used to store a development project.

It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images).

A GitHub repository should also include a licence file and a README file about the project.

A GitHub repository can also be used to store ideas, or any resources that you want to share.

Branch

A GitHub branch is used to work with different versions of a repository at the same time.

By default a repository has a master branch (a production branch).

Any other branch is a copy of the master branch (as it was at a point in time).

New Branches are for bug fixes and feature work separate from the master branch. When changes are ready, they can be merged into the master branch. If you make changes to the master branch while working on a new branch, these updates can be pulled in.

Commits

At GitHub, changes are called commits.

Each commit (change) has a description explaining why a change was made.

Pull Requests

Pull Requests are the heart of GitHub collaboration.

With a pull request you are proposing that your changes should be merged (pulled in) with the master.

Pull requests show content differences, changes, additions, and subtractions in colors (green and red).

As soon as you have a commit, you can open a pull request and start a discussion, even before the code is finished.

A great way to learn GitHub, before working on larger projects, is to open pull requests in your own repository and merge them yourself.

You merge any changes into the master by clicking a "Merge pull request" button.

# PHP

PHP htmlspecialchars() Function

PHP OOP vs Mysqli vs Mysql

PHP Keywords

<https://www.php.net/manual/en/reserved.keywords.php>

Compile-time constants

<https://www.php.net/manual/en/reserved.keywords.php>

# MYSQL

# MARIADB

# Hosting

# XAMPP

What is XAMPP?

XAMPP is the most popular PHP development environment

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.

XAMPP is one of the widely used cross-platform web servers, which helps developers to create and test their programs on a local webserver. It was developed by the Apache Friends, and its native source code can be revised or modified by the audience. It consists of Apache HTTP Server, MariaDB, and interpreter for the different programming languages like PHP and Perl. It is available in 11 languages and supported by different platforms such as the IA-32 package of Windows & x64 package of macOS and Linux.

What is XAMPP?

XAMPP is an abbreviation where X stands for Cross-Platform, A stands for Apache, M stands for MYSQL, and the Ps stand for PHP and Perl, respectively. It is an open-source package of web solutions that includes Apache distribution for many servers and command-line executables along with modules such as Apache server, MariaDB, PHP, and Perl.

XAMPP helps a local host or server to test its website and clients via computers and laptops before releasing it to the main server. It is a platform that furnishes a suitable environment to test and verify the working of projects based on Apache, Perl, MySQL database, and PHP through the system of the host itself. Among these technologies, Perl is a programming language used for web development, PHP is a backend scripting language, and MariaDB is the most vividly used database developed by MySQL. The detailed description of these components is given below.

Components of XAMPP

As defined earlier, XAMPP is used to symbolize the classification of solutions for different technologies. It provides a base for testing of projects based on different technologies through a personal server. XAMPP is an abbreviated form of each alphabet representing each of its major components. This collection of software contains a web server named Apache, a database management system named MariaDB and scripting/ programming languages such as PHP and Perl. X denotes Cross-platform, which means that it can work on different platforms such as Windows, Linux, and macOS.

Many other components are also part of this collection of software and are explained below.

Cross-Platform: Different local systems have different configurations of operating systems installed in it. The component of cross-platform has been included to increase the utility and audience for this package of Apache distributions. It supports various platforms such as packages of Windows, Linus, and MAC OS.

Apache: It is an HTTP a cross-platform web server. It is used worldwide for delivering web content. The server application has made free for installation and used for the community of developers under the aegis of Apache Software Foundation. The remote server of Apache delivers the requested files, images, and other documents to the user.

MariaDB: Originally, MySQL DBMS was a part of XAMPP, but now it has been replaced by MariaDB. It is one of the most widely used relational DBMS, developed by MySQL. It offers online services of data storage, manipulation, retrieval, arrangement, and deletion.

PHP: It is the backend scripting language primarily used for web development. PHP allows users to create dynamic websites and applications. It can be installed on every platform and supports a variety of database management systems. It was implemented using C language. PHP stands for Hypertext Processor. It is said to be derived from Personal Home Page tools, which explains its simplicity and functionality.

Perl: It is a combination of two high-level dynamic languages, namely Perl 5 and Perl 6. Perl can be applied for finding solutions for problems based on system administration, web development, and networking. Perl allows its users to program dynamic web applications. It is very flexible and robust.

phpMyAdmin: It is a tool used for dealing with MariaDB. Its version 4.0.4 is currently being used in XAMPP. Administration of DBMS is its main role.

OpenSSL: It is the open-source implementation of the Secure Socket Layer Protocol and Transport Layer Protocol. Presently version 0.9.8 is a part of XAMPP.

XAMPP Control Panel: It is a panel that helps to operate and regulate upon other components of the XAMPP. Version 3.2.1 is the most recent update. A detailed description of the control panel will be done in the next section of the tutorial.

Webalizer: It is a Web Analytics software solution used for User logs and provide details about the usage.

Mercury: It is a mail transport system, and its latest version is 4.62. It is a mail server, which helps to manage the mails across the web.

Tomcat: Version 7.0.42 is currently being used in XAMPP. It is a servlet based on JAVA to provide JAVA functionalities.

Filezilla: It is a File Transfer Protocol Server, which supports and eases the transfer operations performed on files. Its recently updated version is 0.9.41.

# PHPMyAdmin

## UTF8 vs UTF8MB4

# RESULTS AND DISCUSSION

Present the results of your study. Comment about the results: Are they satisfactory enough to solve your problem mentioned in chapter 1? Use these results to comment about your study: Which part of your study is not good enough and why? Discuss the satisfactory/unsatisfactory parts.

# CONCLUSION

Summary of your work: The important points of the study (from each chapter) should be mentioned, your contribution should be emphasized. The important points of the discussion section should be written and related results should be referred.

Utilizing RSS sources and XML files we have successfully created a Heath News RSS Aggregator. With RSS we can choose to view the news and articles we want, the publications that interest us and are relevant to our work. With RSS we remove unwanted information.

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# APPENDICES

## Appendix 1

**Matlab Code for Numerical Solution of Rayleigh-Lamb Frequency Equations**

clc,clear all

VpMatrix=[0];

i=1;

d = 0.1e-6 % Thickness of the thin AlN plate

h = d/2;

f = 1e8; % Target frequency of SAW device

Vl = 10287.28; % Longitudinal wave velocity

Vs = 5867; % Shear wave or tangential wave velocity

w=2\*pi\*f; % Angular frequency

SignChange=2;

for d = 0.1e-6:1e-6:52.36e-6

h = d/2;

SignChange=2;

for Vp = 1:1:6000; % Phase velocity

k = w/Vp;

p = sqrt((w/Vl)^2-k^2);

q = sqrt((w/Vs)^2-k^2);

% Lamb's equation for antisymmetric modes

lambAsym = real(q\*tan(q\*h) + ((q^2-k^2)^2\*tan(p\*h))/(4\*k^2\*p));

if SignChange~=sign(lambAsym) && sign(lambAsym)~=0 &&...

SignChange ~=2;

SignChange=sign(lambAsym);

disp('kök');

break

end

Vp

if SignChange == 2

SignChange=sign(lambAsym);

end

end

VpMatrix(i)=Vp;

i=i+1;

end

dMatrix = 0.1e-6:1e-6:52.36e-6;

plot(dMatrix,VpMatrix)

1. ### TABLE SCHEMA
3. id
4. title
5. link = guid = atom:link
6. media = enclosure = media:content = image
7. meta\_description = description
8. content = news = content:encoded
9. pubDate

12. ### QUERY FORMAT
14. $query = "INSERT INTO $tableName
15. (title, link, media, meta\_description, content, pubDate) VALUES
16. ($title, $link, $media, $meta\_description, $content, $pubDate);";

19. ### SAMPLE QUERY
21. ```sql
22. INSERT INTO Entries
23. (title, link, media, meta\_description, content, pubDate) VALUES
24. ('Açık havada oynamak kas iskelet sistemi için çok yararlı', 'https://www.sektorel.com.tr/haber/acik-havada-oynamak-kas-iskelet-sistemi-icin-cok-yararli-33481', 'https://www.sektorel.com.tr/images/haberler/2022/06/acik-havada-oynamak-kas-iskelet-sistemi-icin-cok-yararli-1654067466.jpg', 'Yazın gelmesiyle beraber çocukların açık havada daha fazla zaman geçirmesi gerektiğini belirten Fizik Tedavi ve Rehabilitasyon Uzmanı Doç. Dr. Nihal Özaras, fiziksel olarak hareketli olmanın bedensel ve ruhsal açıdan yararlı olduğunu söyledi. Dünya Sağlık Örgütü’nün çocuk ve ergenlerin günde en az bir saat fiziksel olarak aktif olmalarını önerdiğine dikkat çeken Özaras, “Koşma, zıplama, yürüme, uzanma, tırmanma gibi hareketler içeren sporlar veya ev dışında oynanan oyunların, kas iskelet sistemi, denge ve koordinasyon, kalp damar sistemi açısından sayısız faydaları bulunuyor.” dedi.', '<p style=\"text-align:center\"><strong><span style=\"font-size:16px\">Yazın gelmesiyle beraber çocukların açık havada daha fazla zaman geçirmesi gerektiğini belirten Fizik Tedavi ve Rehabilitasyon Uzmanı Doç. Dr. Nihal Özaras, fiziksel olarak hareketli olmanın bedensel ve ruhsal açıdan yararlı olduğunu söyledi. Dünya Sağlık Örgütü’nün çocuk ve ergenlerin günde en az bir saat fiziksel olarak aktif olmalarını önerdiğine dikkat çeken Özaras, “Koşma, zıplama, yürüme, uzanma, tırmanma gibi hareketler içeren sporlar veya ev dışında oynanan oyunların, kas iskelet sistemi, denge ve koordinasyon, kalp damar sistemi açısından sayısız faydaları bulunuyor.” dedi.</span></strong></p> <p style=\"text-align:justify\"><span style=\"font-size:12px\"> </span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">Üsküdar Üniversitesi NPİSTANBUL Beyin Hastanesi Fizik Tedavi ve Rehabilitasyon Uzmanı Doç. Dr. Nihal Özaras, çocukların fiziksel ve ruhsal gelişimi için hareket etmenin önemini vurguladı.</span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">Doç. Dr. Nihal Özaras, geçtiğimiz son iki yılda pandeminin etkisiyle çocukların çok fazla hareketsiz kaldıklarını hatırlattı. Doç. Dr. Nihal Özaras, “Çocuklar bu dönemde evde daha çok kaldıkları için oturarak ya da telefon, tablet veya bilgisayar karşısında vakit geçirme çok yaygınlaştı. Bu durum hem fiziksel hem de ruhsal açıdan pek çok sağlık sorununu beraberinde getiriyor.” uyarısında bulundu.</span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><strong><span style=\"font-size:16px\">Günde en az 1 saat hareket etmeliler!</span></strong></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">Dünya Sağlık Örgütü’nün çocuk ve ergenlerin günde en az bir saat fiziksel olarak aktif olmalarını önerdiğine dikkat çeken </span>Doç. Dr. Nihal Özaras<span style=\"font-size:16px\">, “Bu planlanmış bir spor aktivitesi olabileceği gibi yürümek, parkta ya da bahçede oynamak şeklinde de olabilir.” diye konuştu.</span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><strong><span style=\"font-size:16px\">Açık havada oynamak çocuğun gelişimine katkılar sağlıyor</span></strong></p><p style=\"text-align:justify\"><strong><span style=\"font-size:16px\"> </span></strong></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">Çocuklarda fiziksel olarak aktif olmanın hem bedensel ve hem de ruhsal sağlık açısından çok önemli olduğunu vurgulayan </span>Doç. Dr. Nihal Özaras<span style=\"font-size:16px\">, “Koşma, zıplama, yürüme, uzanma, tırmanma gibi hareketler içeren sporlar veya ev dışında oynanan oyunların, kas iskelet sistemi, denge ve koordinasyon, kalp damar sistemi açısından sayısız faydaları bulunuyor. Ayrıca kalori harcanmasını sağladıkları için kilo kontrolünde de yararlıdır.” dedi.</span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><strong><span style=\"font-size:16px\">Hayal gücünü geliştiriyor</span></strong></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\">Doç. Dr. Nihal Özaras<span style=\"font-size:16px\">, araştırmalarda, özellikle planlama olmadan serbestçe oynanan sokak oyunlarının, çocukların hayal güçlerini geliştirdiğini, yükseklik korkusu gibi bazı korkularını azalttığının ortaya çıktığını söyledi. </span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><strong><span style=\"font-size:16px\">Açık havada yaşıtlarıyla oyun oynasınlar</span></strong></p><p style=\"text-align:justify\"><span style=\"font-size:16px\"> </span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">Fizik Tedavi ve Rehabilitasyon Uzmanı Doç. Dr. Nihal Özaras, sözlerini şöyle tamamladı:</span></p><p style=\"text-align:justify\"><span style=\"font-size:16px\">“Bu araştırmalarda sokak oyunları, yaşıtları ile iletişim becerilerinin ve problemlerle baş etme yeteneklerinin de arttığı ortaya konulmuş. Bu nedenle çocukların ve ergenlerin mümkünse bol bol temiz havada, yaşıtlarıyla oynayarak vakit geçirmelerini öneriyoruz. Yine sevdikleri spor aktivitelerinde yer almaları fiziksel ve ruhsal gelişimleri için çok faydalı olacaktır.”</span></p><p><br>Kaynak: (BHA) - Beyaz Haber Ajansı</p>', 'Wed, 01 Jun 2022 10:11:00 +0300');
25. ```