

FIK-UPH

Website

Kelompok 7:

Andre Kurnia - 00000021269

Michelle Evalista - 01082180042

CRITICAL POINT

01

Call-To-Action

CTA is the most important aspect for web development. More CTA means more insights for analytics!

02

Activities

Sharing newest activities in campus means the campus still alive! Events, Achievements, etc.

03

Marketing

There are many aspects that can be used as marketing content. But transparent is a must!

04

Forms

During this pandemic, we should learned a lot that manual registration is an old-school method.

CONCEPT AND IMPLEMENTATION

“Inspiration starts from thoughts and imagination”

<https://www.figma.com/file/9ENKK9BWUmzlVYzon1uHVW/UPH-WEB?node-id=0%3A1>

concept

SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY

We are one of the Indonesian premier public universities. Dedication to teaching is our priority. Our programs is divided:

Be part of SISTECH!

Learn A Skill.
Build Your Portfolio.
Get Hired!

We are linked to various company that allows us to recommend our students to work in their company.

Join Us

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UPH
UNIVERSITAS PENDIDIKAN HASANUDDIN

Why SISTECH? Programs Curriculum Events Facilities

Join Sistech! Join Sistech!

FALCON 2020 is coming soon!

FALCON is one of main-event in UPH that held by SISTECH. The event consist talkshow, seminar with experienced professional, and also many competitions with national-wide competitors.

Find Out More



implementation

HOME PAGE

Top of the layout will be filled with our activities in the campus. Besides that, We are going to use carousel to maximize the CTA (call-to-action) by giving the most recent updates and informations.



concept



implementation

PARTNERSHIP

By showing our partners after the header (activities) on the top means
we show to the world that we are global university with global partners.

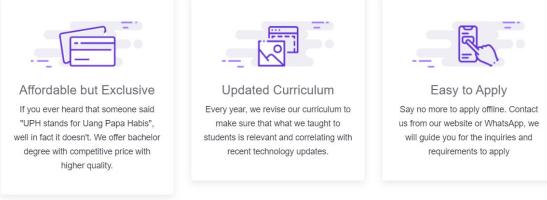
WHY SISTECH?



Unlimited Access
One subscription unlimited access

Expert Teachers
Learn from industry experts who are passionate about teaching

Learn Anywhere
Switch between your computer, tablet, or mobile device.



Affordable but Exclusive
If you ever heard that someone said "UPH stands for Uang Papa Habis", well in fact it doesn't. We offer bachelor degree with competitive price with higher quality.

Updated Curriculum
Every year, we revise our curriculum to make sure that what we taught to students is relevant and correlating with recent technology updates.

Easy to Apply
Say no more to apply offline. Contact us from our website or WhatsApp, we will guide you for the inquiries and requirements to apply

concept

implementation

Giving fun fact about UPH and features that UPH offers is the best way to crush their old stigma about UPH. The content itself will be a motivation for readers to register.

ALUMNUS SHARING

concept

What Students Say

Semaj Africa is an online education platform that delivers video courses, programs and resources for Individual, Advertising & Media Specialist.

“

Quisque eu pharetra odio. Pellentesque non et a urna sagittis aliquam eget non enim. In sapien nibh, placerat quis odio nec, volutpat tempus odio. Nunc quis malesuada turpis. Vestibulum dapibus lacus hendrerit.

Sheila Lolitha
Lead Programmer at Shopee

“

Quisque eu pharetra odio. Pellentesque non mi a urna sagittis aliquam eget non enim. In sapien nibh, placerat quis odio nec, volutpat tempus odio. Nunc quis malesuada turpis. Vestibulum dapibus lacus hendrerit.

Michelle Evalista
Web Developer At Sictex

“

Quisque eu pharetra odio. Pellentesque non mi a urna sagittis aliquam eget non enim. In sapien nibh, placerat quis odio nec, volutpat tempus odio. Nunc quis malesuada turpis. Vestibulum dapibus lacus hendrerit.

“

Quisque eu pharetra odio. Pellentesque non mi a urna sagittis aliquam eget non enim. In sapien nibh, placerat quis odio nec, volutpat tempus odio. Nunc quis malesuada turpis. Vestibulum dapibus lacus hendrerit.

Andre Kurnia
Developer at Berca

SISTECH has helped me to achieve my goals. Without SISTECH, I wouldn't be as confident as I am. I was able to learn skills that were to help me to be relevant in the technology world and to help me to develop my programming, debugging, and communication skills.

Andre Kurnia
Adira Finance Data Analyst

implementation

What Alumnus Experienced

At SISTECH, the learning system that they implemented is such a journey where I can enjoy studying about programming, developing many applications and enriching my professional network with new friends.

Sheila Lolitha
Tokopedia Front-End Developer

I am proud and glad to say that I am SISTECH alumni today. The program has enabled me to view opportunities from a 360 approach. SISTECH has helped me achieve my goals, by reinventing the way I think through challenges. I have been equipped with a robust process on how to think through challenges and identifying solutions.

Nicky Logan
Shopee Singapore Fullstack Developer

Here what students have to say about their experience study Informatics and Information Systems at Universitas Pelita Harapan.

ALUMNUS STORIES

concept



implementation



They share their experiences, their stories and how impactful it is after joined
SISTECH UPH.

Let's Talk!

We do normally get back within 48hrs. Please leave a message.

Full Name
Country / Region
Street Address
City
Your Message

Send Message

concept

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Need a help?
Don't worry just contact us

Fullscreen
Email
Message



Send Message

implementation

CONTACT US

Provide the user with information on how they can get in touch with the PIC for send questions or criticism and suggestions.

ABOUT US

concept

about-us-page

UPH
UNIVERSITAS PELITA HARMONI

Home About Programs Gallery History Virtual Tour Be part of SISTECH

WE'RE

First impression to build audience trust and loyalty, should make sure to cover basic information about the faculty's purpose by vision and mission, teams, and partnership.

implementation

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UPH
UNIVERSITAS PELITA HARMONI

Why SISTECH? Programs Curriculum Events Facilities Join Sistech! Join Sistech!

About Us

Home • About

Our Vision

To be a Christ-centered university founded upon and promoting true knowledge, faith in Christ and godly character aiming to develop God-fearing, competent and professional future leaders through excellent, holistic and transformational education.

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Meet Our Lectures

Dr.(Eng). Ir.Pujianto Yugopuspito, M.Sc.
School of Information Science & Technology
Dean

Irene Astuti Lazarusli, S.Kom., M.T.
Department Chair of Informatics

Arnold Arbowo, S.T., M.T.
Department Chair of Information Systems

Partners

amazon web services Google Cloud Microsoft IBM

concept

Welcome to Our
Forever Updated
Blog Post!

The hate you give is the hate you'll eventually get
— Arnold Schwarzenegger

implementation

Search
Type a keyword and hit enter

Jobs

- Kotlin Developer 12
- DevOps 22
- Fullstack Developer 37
- Project Manager 44
- Web Developer 140
- Backend Engineer 140

Recent Blog

Comments

Arnold Wibowo MAY 16, 2020 AT 11:10PM

Finally I can see more materials that have awesome skill in Programming. Would be awesome if I know some of them and recruit them for my future project with KEMENRISTEK.

Reply

Arnold Wibowo MAY 16, 2020 AT 11:10PM

Sheila Lolitta MAY 16, 2020 AT 9:17PM

It's been 2 years already since I had the experience as coordinator handling this project. Good luck for my fellow juniors. God bless you all!

Reply

Irene Lazarus MAY 31, 2020 AT 5:57AM

Come visit us soon. She! Would be great if you join us as a speaker. I hope you had a great career out there!

Reply

PELUANG INVESTASI SHATINI

EVENTS

An event which is organized or presented by a recognized student organization by SISTECH UPH.

WEBSITE DEVELOPMENT



~~Hosting + Domain~~
AWS Facilities
<http://52.23.33.87/>

first method.



```
andre-dev@ak-x455lf:~/aws$ scp -i webserver.pem  
~/Documents/website/codes/fik-uph/assets/img.zip ubuntu@ec2-34-236-  
171-145.compute-1.amazonaws.com:~/var/www/html/assets  
  
img.zip                                100% 1443KB 133.4KB/s  00:10  
  
andre-dev@ak-x455lf:~/aws$ ssh -i "webserver.pem" ubuntu@ec2-34-236-  
171-145.compute-1.amazonaws.com  
  
ubuntu@ip-172-31-70-234:~$ cd /var/www/html/assets  
  
ubuntu@ip-172-31-70-234:/var/www/html/assets$ sudo unzip img.zip  
Archive: img.zip
```

Moving all the local asset into the aws instance



PROBLEM

It's hard for versioning of the web. Especially
when the website itself will always be
maintained for changes due to the campus
activities. It's lack of flexibility and efficiency
as well.

SOLUTION

We create the **storage** from the AWS product itself that has versioning feature. Despite the storage necessary, we use the another product from AWS for **database** requirement.



second method.

Web Development [Full AWS]



Amazon
EC2

Instance



Amazon S3

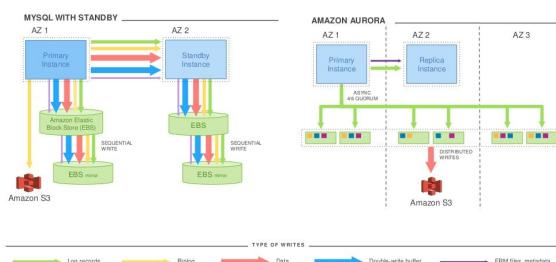
Storage



Amazon RDS

Database (aurora)

Aurora requires fewer I/Os



Amazon Elastic Compute Cloud

Amazon Simple Storage Service

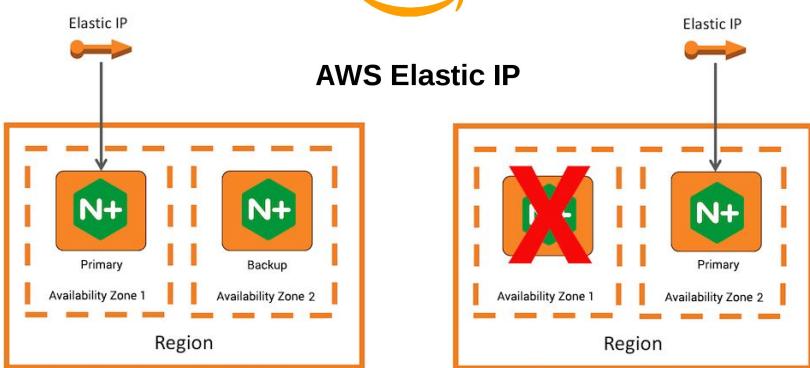
Amazon Relational Database Service

Amazon Aurora vs. MySQL

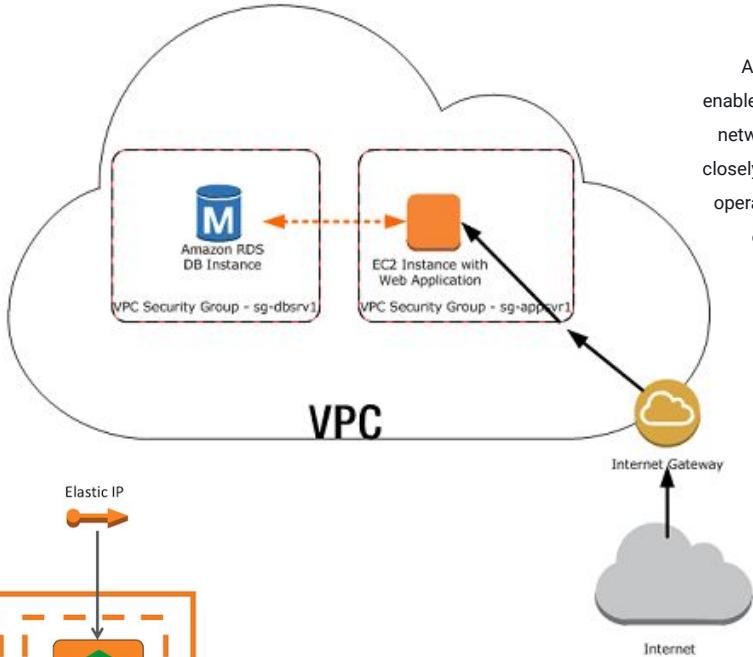
Feature	RDS Aurora	RDS MySQL
Number of replicas	Up to 15	Up to 5
Replication type	Asynchronous (milliseconds)	Asynchronous (seconds)
Replication performance impact on primary	Low	High
Replica can act as failover target	Yes (no data loss)	Yes (potentially minutes of loss)
Storage	Up to 64 TB, auto growth	Up to 6 TB, specify storage limit
Automated failover	Yes, to replica	Yes, to standby
User-defined replication delay	No	Yes
Replica support for different data or schema vs. primary	No	Yes
Cross-region replication	No	Yes
Data cache survives	Yes	No

other features implemented.

An **Elastic IP address** is a static IPv4 address designed for dynamic cloud computing. By using an Elastic IP address, we can mask the failure of an instance or software by rapidly remapping the address to another instance in our account.



Future integration : Amazon Route 53 which is a scalable and highly available Domain Name System service.



Amazon Virtual Private Cloud enables us to launch AWS resources into a private network that we've defined. This closely resembles a traditional network that we operate in our own data center, without the cost of using the scalable infrastructure.

Snapshot lifecycle policy.

You can use Amazon Data Lifecycle Manager to automate the creation, retention, and deletion of EBS snapshots and EBS-backed AMIs. When you automate snapshot and AMI management, it helps you to:

- Protect valuable data by enforcing a regular backup schedule.
- Create standardized AMIs that can be refreshed at regular intervals.
- Retain backups as required by auditors or internal compliance.
- Reduce storage costs by deleting outdated backups.

integration.

	Name	Type	Version ID
□	.idea/	Folder	-
□	about.html	html	JRoPzgGz2hTPtrOJ5MX9FYtwp.6BC07f
□	about.html	html	Q_W6.YCJ9YqqATa_VM9Jx06jTwH.8Jsh
□	about.html	html	1J1awQzhArSwl5rzlBo5XDG.Hsl_FbnI
□	assets/	Folder	-
□	contactform.php	Delete marker	wJnl_pXPJDPAOO_OxZYbt8QERbmerA
□	contactform.php	php	9FbsmkfTjlVc4FsE0Lk9T5gWaDpRqQte
□	html/	Folder	-

S3 Bucket with versioning feature

Route Table ID	rtb-1efda960
Explicitly Associated with	6 subnets
Owner	818624422500
VPC Integration for all services.	

```
ubuntu@ip-172-31-69-101:~$ curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"
% Total % Received % Xferd Average Speed Time Time Time Current
          Dload Upload Total Spent Left Speed
100 33.0M 100 33.0M    0     0  141M      0 --:--:-- --:--:-- 141M
ubuntu@ip-172-31-69-101:~$ sudo apt-get install unzip
ubuntu@ip-172-31-69-101:~$ unzip awscliv2.zip
ubuntu@ip-172-31-69-101:~$ sudo ./aws/install
ubuntu@ip-172-31-69-101:~$ sudo aws s3 sync s3://web-tayonara/fik-uph/ /var/www/html
```

EC2 - S3 Sync commands

phpMyAdmin



Current server:
database-fik.cluster-cdyj7

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU
database-fik	Serverless	Aurora MySQL	us-east-1	1 capacity unit	Available	<div style="width: 10.60%;">10.60%</div>
webdb	Instance	MySQL Community	us-east-1c	db.t2.micro	Available	<div style="width: 2.62%;">2.62%</div>

AWS RDS - phpMyAdmin integration

IMPLEMENTATION

DESKTOP EXPERIENCE

Bootstrap

Bootstrap really helps us to make the web-design especially navigation-bar more aesthetic for mobile-view

Animation

We developed our extra time for animation. It's not just an 'animation', We did efficiency for it too!

Performance Oriented

Performance is our main thing to achieved for this. Why? To make the web enjoyable to look at.

1

2

3



DESKTOP PERFORMANCE TEST

SCORE + GOODSIDE

97

<http://3.238.130.47/>

Lab Data

- First Contentful Paint 0.4 s First Contentful Paint marks the time at which the first text or image is painted. [Learn more.](#)

Time to Interactive 0.4 s
Time to interactive is the amount of time it takes for the page to become fully interactive. [Learn more.](#)

- Speed Index 1.2 s Speed Index shows how quickly the contents of a page are visibly populated. [Learn more.](#)

Total Blocking Time 0 ms
Sum of all time periods between FCP and Time to Interactive, when task length exceeded 50ms, expressed in milliseconds. [Learn more.](#)

- Largest Contentful Paint 0.7 s Largest Contentful Paint marks the time at which the largest text or image is painted. [Learn More](#)

Cumulative Layout Shift 0.204
Cumulative Layout Shift measures the movement of visible elements within the viewport. [Learn more.](#)

Scored by Google PageSpeed Insights



Performance grade
B 84

Load time
809 ms

Page size
1.5 MB

Requests
30

Scored by Pingdom

GTmetrix Grade ?

A

Performance ?
94%

Structure ?
88%

Scored by GTmetrix

DESKTOP PERFORMANCE TEST

DOWNSIDE + SOLUTION

Opportunities — These suggestions can help your page load faster. They don't **directly affect** the Performance score.

Opportunity	Estimated Savings
■ Properly size images	0.6 s
■ Serve images in next-gen formats	0.52 s
■ Eliminate render-blocking resources	0.29 s

Diagnostics — More information about the performance of your application. These numbers don't **directly affect** the Performance score.

▲ Does not use passive listeners to improve scrolling performance	▼
▲ Serve static assets with an efficient cache policy — 28 resources found	▼
● Avoid chaining critical requests — 9 chains found	▼
● Keep request counts low and transfer sizes small — 29 requests • 1,265 KiB	▼
● Largest Contentful Paint element — 1 element found	▼

IMPACT	AUDIT
Med	Eliminate render-blocking resources
Med	Serve static assets with an efficient cache policy
Med-Low	Use a Content Delivery Network (CDN)
Low	Properly size images
Low	Use passive listeners to improve scrolling performance

Scored by GTmetrix

Scored by Google PageSpeed Insights

MOBILE EXPERIENCE

UI/UX VIEW

By using bootstrap, the navigation bar itself 'squeezed' into the hamburger button. Most of the content need to be resized because most of it are too big to fit 'aesthetically' in the mobile screen.

The boundaries to adapting various screen size is important in this state.



MOBILE EXPERIENCE

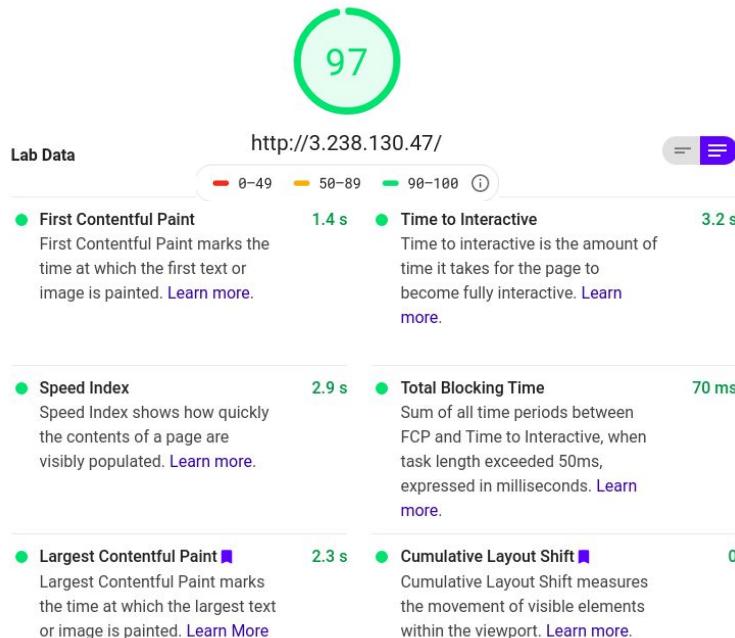
NOT THAT 'GREAT'

There are some feature that fit for mobile experience and some others are bad. Need to use the on/off function on the html.



MOBILE PERFORMANCE TEST

SCORE + GOODSIDE



GOOGLE PAGESPEED SCORE	85	LOAD TIME	1.2 s	SIZE	1256.6 kB	REQUESTS	29
LOCATION	Amsterdam-2	DEVICE	Apple iPhone 8	BROWSER	Chrome 87	CONNECTION	Native speed

Scored by UpTrends

Scored by Google PageSpeed Insights

MOBILE PERFORMANCE TEST

DOWNSIDE + SOLUTION

⌚ <http://3.238.130.47/>
⌚



The tested page scored very well at 3.46 out of 5 but could still be made more mobile mobiReady. Many significant test failures were detected, these are likely to directly impact the user. The page download weight is acceptably low, this is likely to improve user experience.

Scored by MobiReady

Opportunities — These suggestions can help your page load faster. They don't **directly affect** the Performance score.

Opportunity	Estimated Savings
▲ Properly size images	3.3 s ▾
▲ Serve images in next-gen formats	2.85 s ▾
■ Eliminate render-blocking resources	0.73 s ▾
■ Efficiently encode images	0.3 s ▾
■ Remove unused CSS	0.15 s ▾

Scored by Google PageSpeed Insights

Performance improvements

IMPACT	IMPROVEMENT
HIGH	Properly size images
HIGH	Serve images in next-gen formats
HIGH	Eliminate render-blocking resources
MEDIUM	Efficiently encode images
MEDIUM	Remove unused CSS

Scored by UpTrends

Diagnostics — More information about the performance of your application. These numbers don't **directly affect** the Performance score.

- ▲ Does not use passive listeners to improve scrolling performance ▾
- ▲ Serve static assets with an efficient cache policy — 28 resources found ▾
- Avoid chaining critical requests — 9 chains found ▾
- Keep request counts low and transfer sizes small — 29 requests • 1,265 Kib ▾
- Largest Contentful Paint element — 1 element found ▾
- Avoid large layout shifts — 1 element found ▾
- Avoid long main-thread tasks — 3 long tasks found ▾

Scored by Google PageSpeed Insights

LESSON LEARNED

By doing trial & error, things learned that...

1.

BOOTSTRAP

Make sure that websites are responsive and mobile-friendly.

2.

IMPRESSION

Adequate background theme, fonts, icon designs, color combinations, proper animations, layout, and maintaining the sections.

4.

AWS

Scalable, high-performance, and versatile.

5.

DEV-OPS

We once knew the hosting & domain capability. But we're shock see the back-process of it when we use AWS Services.

3.

WEB-DEV

HTML, JavaScript, CSS, Framework, PHP, and Cloud Computing.

6.

JOURNEY

We have to know the user journey when they visiting the web. Take credit for the good-side, make revision for the bad-side.

THANK YOU!

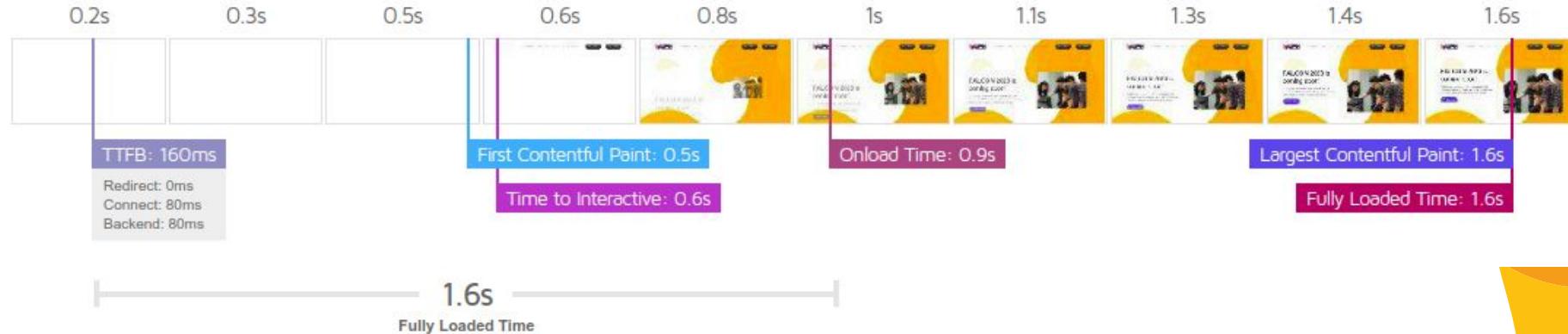
For your attention, appendix
attached after this slide.

waterfall test.

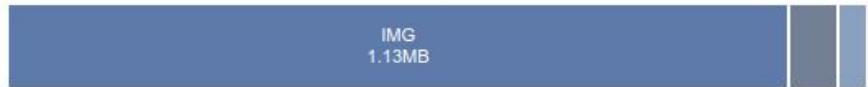


appendix.

Speed Visualization ?



Total Page Size - 1.24MB



Total Page Requests - 30



size & request.

appendix.

Content size by content type

CONTENT TYPE	PERCENT	SIZE
Image	91.01%	1.2 MB
Script	5.49%	71.6 KB
CSS	3.12%	40.7 KB
HTML	0.38%	5.0 KB
Total	100.00%	1.3 MB

Requests by content type

CONTENT TYPE	PERCENT	REQUESTS
Image	65.52%	19
Script	17.24%	5
CSS	13.79%	4
HTML	3.45%	1
Total	100.00%	29

Content size by domain

CONTENT TYPE	PERCENT	SIZE
3.238.130.47	100.00%	1.5 MB
Total	100.00%	1.5 MB

Requests by domain

CONTENT TYPE	PERCENT	REQUESTS
3.238.130.47	100.00%	30
Total	100.00%	30



content types.

appendix.