



UNIVERSITI  
MALAYSIA  
PERLIS



# FAITH

*Faculty of Industrial Technology  
International Competition*

## OFFICIAL GUIDEBOOK

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[faith.petra.ac.id](http://faith.petra.ac.id)

**PETRA CHRISTIAN UNIVERSITY**

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# CHAPTER 1

## Introduction

At the beginning of 2020, the whole world was startled by the Covid-19 pandemic. Every country in the world was affected by this pandemic, including Indonesia. The first COVID-19 case confirmed by the Indonesian government was at the beginning of March, 2020. Various methods have been made by the Indonesian government to reduce the spread of the virus. However, the methods have affected many sectors ranging from the economy, health, tourism, and production sector. Some sectors have paused their activities temporarily, for example, manufacturing has had to stop operating due to this pandemic. All hotels and tourist agencies had to shut down the business temporarily because Indonesia did not accept any foreigners and local tourists, and the economic growth slowed down as the government applied large-scale social restrictions. This pandemic situation certainly collides with the 4.0 industrial revolution which causes greater technological disruption in everyday life. This can be seen from activities such as working from home, attending school from home, and doing other forms of activities, which are usually done offline and have gone online due to this pandemic.

Data from Seattle Office of Economic Development describes in detail the consequences of the COVID-19 pandemic on economic activities which initially had stable growth, but due to the pandemic, became unstable. COVID-19 pandemic has caused the loss of jobs, approximately 200,000 every week. With the loss of workers, companies certainly need alternative technological solutions that allow them to continue to run their businesses with less physical contact among workers. Naturally, this can be answered by the development of technology in the era of the industrial revolution 4.0, which is full of industrial automation and modern industrial systems. The three basic components of automation are the use of robots, software, and artificial intelligence to replace human labor with more economical machine power.

The disruptive changes, which are caused by digitalization due to the COVID-19 pandemic and automation due to the 4.0 industrial revolution, have changed the nature and skill requirements of jobs and the workforce needed. From one perspective, technology can create new jobs, reduce production costs, increase efficiency and productivity, and accelerate economic growth. On the other hand, this COVID-19 pandemic disruption is projected to change the workflow and the level of job acceptance rates, which will decrease due to automation. According to the International Labor Organization (ILO), in the future, new job challenges will raise difficulties for job seekers, given that the increase in robot learning capability is greater than the increase in human capabilities. Considering all these situations, we respond by trying to evoke and encourage young generation, especially the future workforce (who are currently still in college) to be able to create and or conduct research related to the development of industrial revolution 4.0, which is currently disrupted by COVID-19 pandemic, through FAITH INTERNATIONAL COMPETITION 2021. This competition will encourage participants to create new technologies or make new improvements from the existing technology, using their abilities to think creatively and innovatively in facing the uncertainties they will face in the future business world.

# CHAPTER 1

## Purpose of Event

### **General Purpose**

- a. Participants can create ideas or technological creations that are useful in life, especially in the era of COVID-19 pandemic which is adjusted to technological developments in the era of the industrial revolution 4.0.
- b. Participants can conduct research and understand the developments along with work changes that happen in the future due to the disruption of COVID-19 and industrial revolution 4.0.

### **Special Purpose**

- a. For Participant
  - i. Training their creativity and technology innovation.
  - ii. Practicing their research skills.
  - iii. Getting to know the Faculty of Industrial Technology at Petra Christian University.
  - iv. Getting to know Petra Christian University.
- b. For the Faculty of Industrial Technology, Petra Christian University
  - i. A Platform that introduces the Faculty of Industrial Technology of Petra Christian University to an international academic environment especially in Asia and beyond
- c. For Petra Christian University
  - i. A Platform that introduces Petra Christian University to an international academic environment especially in Asia and its surroundings
- d. For Partners
  - i. Getting the increase of their exposure to the participants through our event

# CHAPTER 2

## General Requirements

1. Participants must be currently enrolled in a university.
2. Participants must be currently pursuing a diploma or a bachelor's degree.
3. Every team must contain at least 2 undergraduate students and at most 3 undergraduate students.
4. Participants are allowed to compete in more than one division in FAITH INTERNATIONAL COMPETITION 2021.
5. The names of the participants must be written in a complete form without abbreviations.
6. All participants must abide by the given Event Schedule. Late submissions will not be graded and will be considered as an act of surrendering.
7. Official time zone of FAITH INTERNATIONAL COMPETITION 2021 is GMT/UTC +07:00 (Western Indonesia Time Zone)
8. FAITH INTERNATIONAL COMPETITION 2021 will be held **online** with submission dates from 10 June 2021 to 7 August 2021.
9. Any kind of submission must be authentic, original, and new. Violation of this rule will result in disqualification from FAITH INTERNATIONAL COMPETITION 2021 permanently.
10. The copyright of products belongs to the participants. FAITH INTERNATIONAL COMPETITION 2021 committee and sponsors only have the right of publication.
11. The official language used in FAITH INTERNATIONAL COMPETITION 2021 is English(US).
12. It is **STRICTLY PROHIBITED** to include hate speech, racism, mockery, or other forms of verbal abuse in the contents of submissions.

# CHAPTER 2

## Competition Divisions

All competitions held in FAITH INTERNATIONAL COMPETITION 2021 are held in 1 (one) stage only. All of the participants will get a specific period of time to work on the tasks given and submit all the work at once. This competition will be held **online**, with the rules of each competition explained in the next chapters of this guide book.

FAITH INTERNATIONAL COMPETITION 2021 hosts 4 divisions of competition, which are divided based on the disciplines of each division. Here are the 4 divisions of FAITH INTERNATIONAL COMPETITION 2021 :

INDUSTRIAL ENGINEERING COMPETITION (Statistics and Data Analysis)

MECHANICAL ENGINEERING COMPETITION (Product Design)

ELECTRICAL ENGINEERING COMPETITION (Internet of Things Device Design)

INFORMATICS COMPETITION (Web-Based Application Design)

## Registration

1. Registration is done online by accessing [faith.petra.ac.id](http://faith.petra.ac.id). Follow the steps provided in the registration website.
2. Download the MASTER GUIDE BOOK of FAITH INTERNATIONAL COMPETITION 2021 located at the registration website.

**Scan**



# CHAPTER 2

## Event Schedule

### Competition Registration

- Day / Date : 17 May 2021 - 7 August 2021
- Place : FAITH 2021's Website

### Online Submission

- Day / Date : 10 June 2021 - 7 August 2021
- Place : FAITH 2021's website

### Judging Period

- Day / Date : 9 August 2021 - 14 August 2021

### Instagram Challenge Period

- Day / Date : 9 August 2021 - 14 August 2021
- Place : Instagram

### Winner Announcement

- Day / Date : August 16, 2021
- Time : 16.00 WIB
- Place : FAITH 2021's website

**\*Winners of *FAITH INTERNATIONAL COMPETITION 2021* will also receive email notifications from the committee.**

# PRIZE

For each competition, participants will get a prize as listed below.



Rp 6.000.000,-  
(for approximately USD 420 \*\*)



Rp 4.300.000,-  
(for approximately USD 301 \*\*)



Rp 2.700.000,-  
(for approximately USD 189 \*\*)



Rp 1.000.000,-  
(for approximately USD 70 \*\*)

\*\*Exchange Rate used: 1 USD = 14,275.90 IDR





# FAQs

**Q: Where do I begin to register for FAITH INTERNATIONAL COMPETITION 2021 ?**  
You can begin by first accessing [faith.petra.ac.id](http://faith.petra.ac.id). All the registration instructions and other important information will be posted there.

**Q: Can I enter a competition division, but I'm not a student of the selected major ?**

Yes, you are permitted to enter a competition even if you do not major in that specific division. You do not even have to be pursuing an engineering degree to enter.

**Q: Can I form a team consisting of students from multiple universities ?**

No, unfortunately you are not allowed to form a team consisting of students from multiple universities. However, you can form a team consisting of students from different majors in the same university.

**Q: Can I change/update the data of the team members ?**

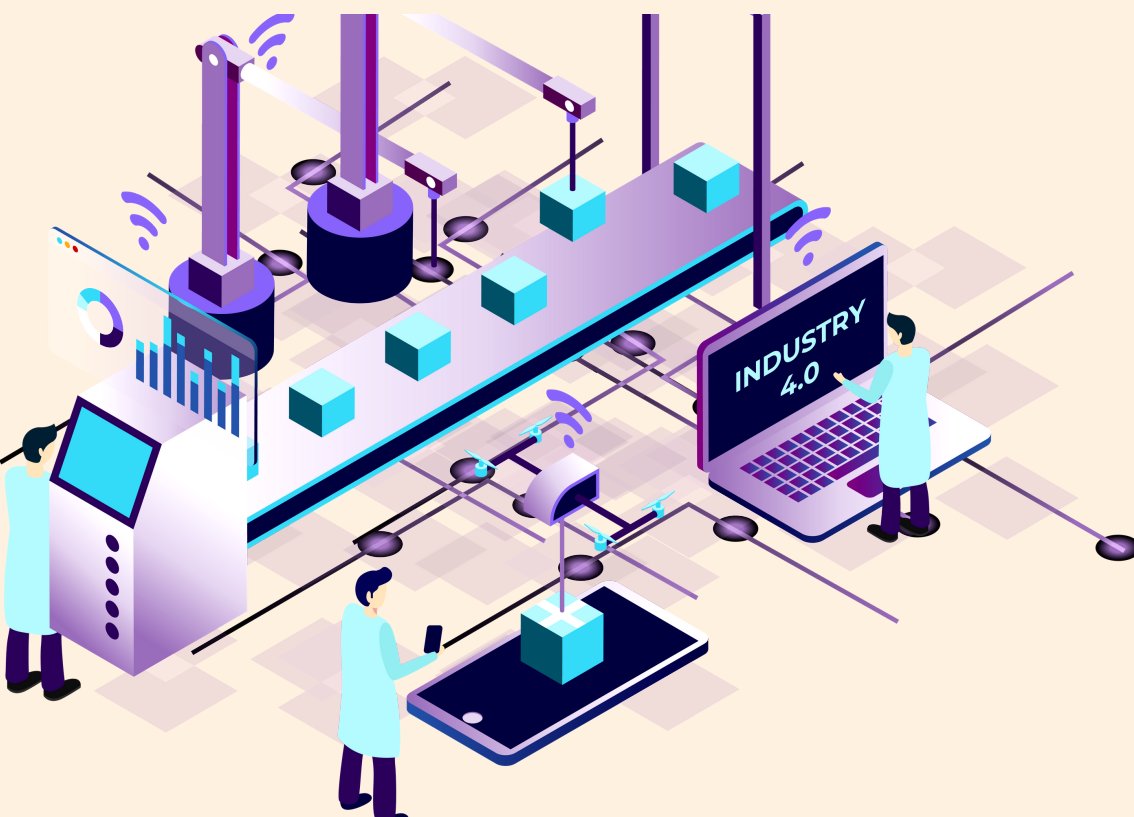
No, you are not allowed to change any data once they are submitted.

**Q: What if I don't have a student ID to prove my identity as a student ?**

A formal letter of proof as a student from campus or a URL of your institution's publicly accessible web page that proves your student status are acceptable as a student ID substitute.

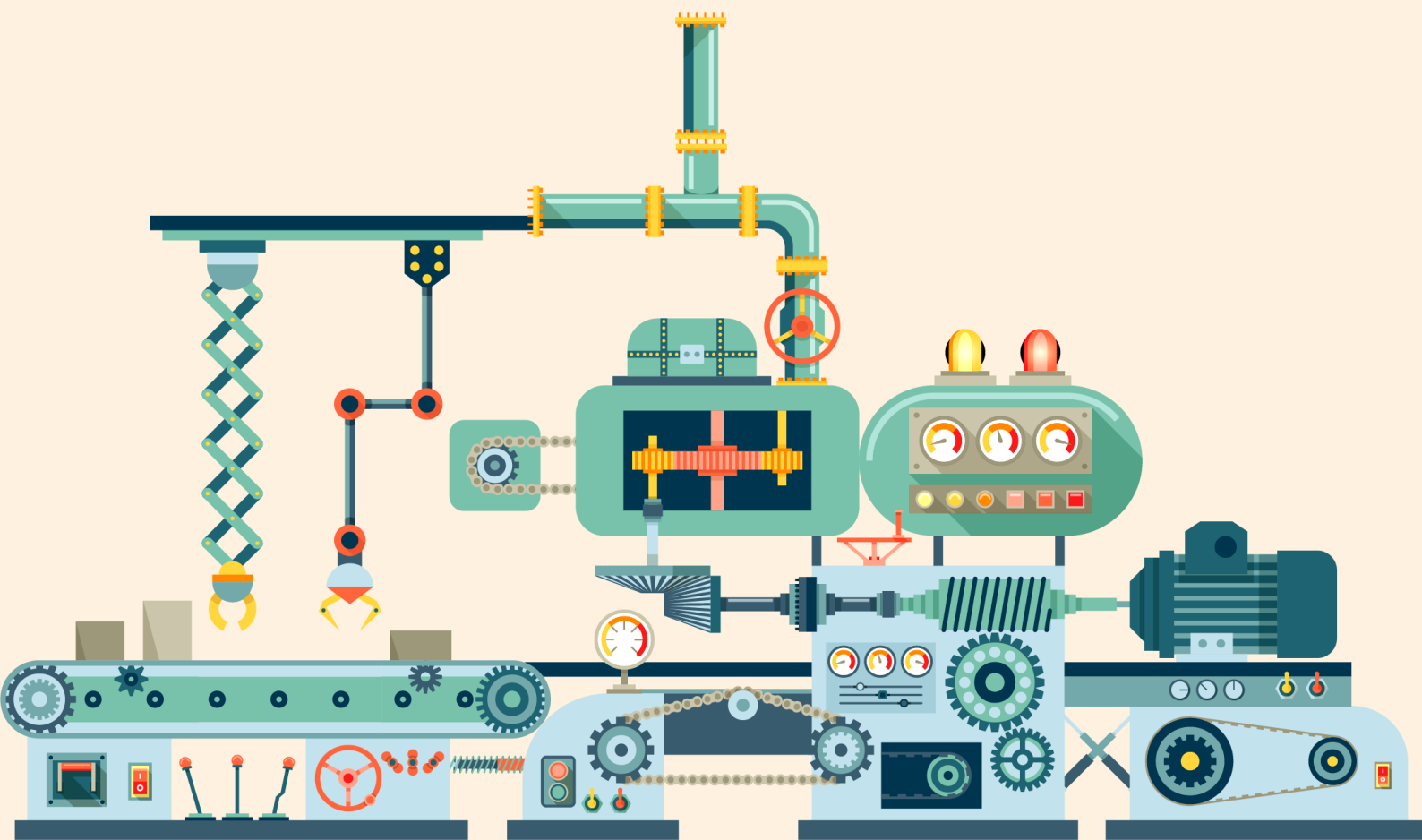
**Q: Must I attach all of the logos from APPENDIX 2 to the poster and/or the video we make ?**

Yes, all logos must be attached to the poster and/or the video made by the participants. The requirements are all clearly stated in each competition's poster requirement section.



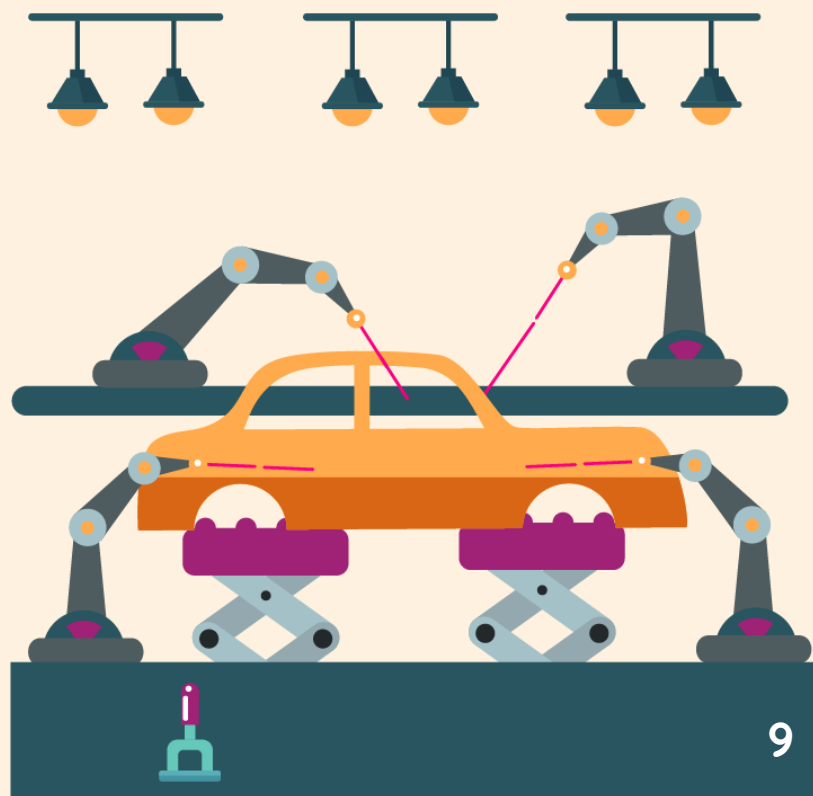
# INDUSTRIAL ENGINEERING

## SCIENTIFIC COMPETITION



# TECHNICAL PROCESS

1. Conduct your research after reading all the terms and regulations comprehensively (Refer to **MOTIVATION AND GUIDELINES**)
2. Write your report.
3. Design your poster and video.
4. Upload your report, poster, and video to Google Drive and compile them into **one folder**.
5. Set the folder so that **ANYONE WITH THE LINK** can access it.
6. Submit your Google Drive link at [faith.petra.ac.id](http://faith.petra.ac.id). Follow the instructions at the website.
7. Wait for further instructions from the *FAITH INTERNATIONAL COMPETITION 2021* committee.



# MOTIVATION AND GUIDELINES

1. This competition's challenge is to conduct research based on case study, which in this case means that the research is done by referring to statistics and other supporting data available online. The research topic will be about COVID-19, and it is limited to the ongoing pandemic or solutions to alleviate the pandemic.
2. These data will then be processed accordingly, and one (or more) conclusion can be made.
3. Furthermore, you can also propose solutions as a response towards the conclusion made.
4. If the conclusion does not need to be followed by a solution, you must state the assumptions needed in order to ensure the conclusion can be achieved in the future.
5. Here are a few examples of research topics. You can use these topics in your research, or you can create your own topic, as long as it can be considered challenging and still in the context of COVID-19 pandemic.
  - a. Prediction on when COVID-19 pandemic ends in Indonesia or in the world.
  - b. Various scenarios of Indonesia's laws/policies evaluation due to COVID-19
  - c. The need for a new vaccine.
  - d. A new breakthrough for vaccine distribution throughout the world.
  - e. Other interesting topics related to COVID-19 proposed by participants.
6. It is important that your research is authentic and original. Any form of plagiarism will be dealt with severely and may end up in disqualification for the perpetrator.
7. The Poster and The Video basically should summarize your report in a creative way. Its presentation affects the decision of the judges. You must try to make your poster and video so that they can be understood not only by the judges but ultimately also to non-engineering individuals.
8. Try to position yourself as a person who is really anxious or paranoid of COVID-19 pandemic. Use this perspective to think about what kind of information this person really needs to get through this pandemic. This might help with your framework of thinking before starting your research.
9. Remember that there is also a winning category that challenges participants to get likes from Instagram posts of their poster. Therefore, make sure that your poster can pique viewer's interest. Refer to **CHAPTER 3-V (INSTAGRAM CHALLENGE)**.

# REPORT REQUIREMENT

1. Report must be uploaded with file type : **PDF**
2. Report must contain **at least** :
  - a. Title
  - b. Introduction
  - c. Literature Review (Statistics and other supporting data)
  - d. Results
  - e. Reference
3. Report must also include in-text citations when referring to a source. All references and in-text citations must be done in **APA** format.
4. Report Document Formatting:
  - a. Font : Times New Roman
  - b. Fontsize : 12 (Body)
  - c. Margins : 2.54 cm (All)
  - d. Spacing : 1.15
  - e. Size : A4



# POSTER REQUIREMENT

1. Poster must be uploaded with file type : **PNG** (High resolution)
2. Poster size is A3 with no crop marks or transparent pixels. Maximum file size is 10MB.
3. Poster must contain **at least** :
  - a. Title
  - b. Summary of the case study
  - c. Charts and/or pictures
  - d. Explanation for charts and/or pictures
4. Poster must contain no more than 300 words, excluding the participants' names and the title of the poster.
5. The only personal information that is allowed to be presented in the poster is the name or the nickname of the designer.
6. ***FAITH INTERNATIONAL COMPETITION 2021 logo*** must be included in the poster. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)



# VIDEO REQUIREMENT

1. Video must be uploaded with file type : **MP4**.
2. Video resolution must be at least 360p and at most 720p.
3. The maximum file size of the video is 600 MB.
4. Video duration must be 4 – 8 minutes.
5. Video must contain at least introduction of participants, research results, and summary of contents from the report.
6. Participants must make an appearance in the video (not necessarily in the entire video).
7. Usage of artificial voice generators is **STRICTLY PROHIBITED**.
8. Any form of speech in the video must be done with clear pronunciation.
9. The only personal information that is allowed to be presented in the video is the name or the nickname of the video creators.
10. **FAITH INTERNATIONAL COMPETITION 2021 logo** must be included in the video. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)
11. The logo may be shown in the beginning, in the end, or during the entire video.



# EVALUATIONS CRITERIA AND SCORING

## 1. Report - 50%

- a. Reference Data Validity - 10%
  - i. Data obtained from trusted sources.
  - ii. Data is up to date.
  - iii. Data is relevant to the research done.
- b. Main Content - 25%
  - i. Framework of Thinking :
    - Reasonable
    - Logical
    - Realistic
    - Creative
  - ii. Data Processing
  - iii. Accuracy of causality in relating more than one data.
- c. Conclusion and Solution- 15%
  - i. Conclusion General Criteria :
    - Logical
    - Realistic
    - Does not stray away from the main content
  - ii. Conclusion must be accompanied by the pros and cons of the conclusion itself.
  - iii. Solution General Criteria :
    - Logical
    - Realistic
    - Creative
    - Specific
    - Original

## 2. Poster - 20%

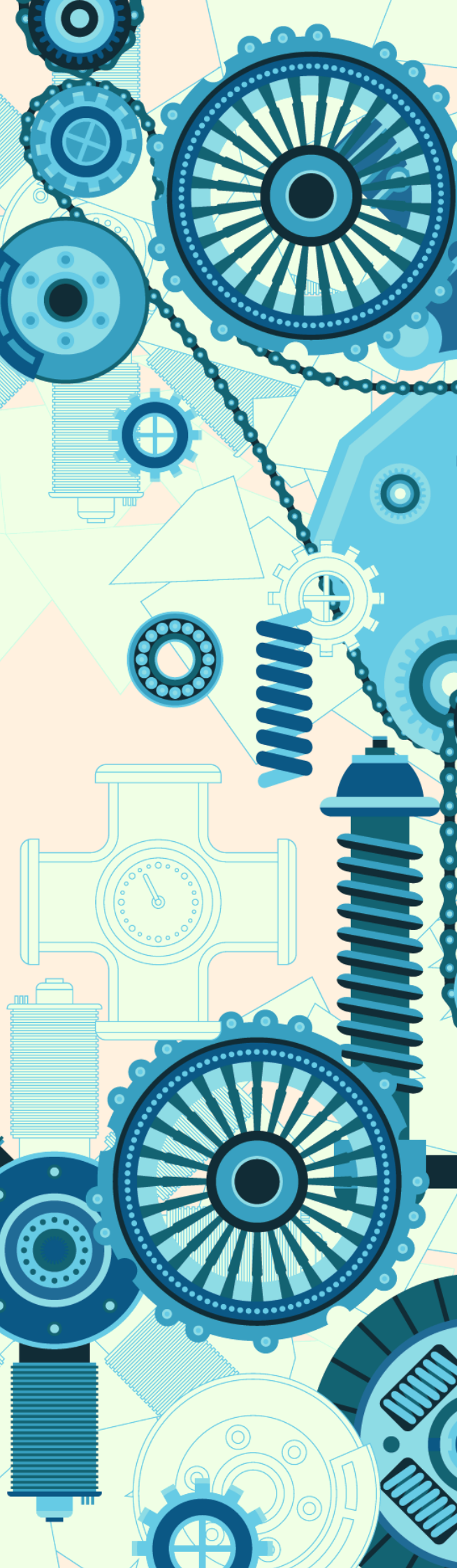
- a. Explanation - 10%
  - i. Poster gives clear explanations.
  - ii. Poster summarizes the research entirely
  - iii. Contents are understood by non-engineering individuals.
- b. Poster Design - 10%
  - i. Poster is easy to read.
  - ii. Poster is designed in a creative and modern styling.

## 3. Video - 30%

- a. Explanation - 15%
  - i. Video contains clear explanations.
  - ii. Video summarizes the research entirely.
  - iii. Contents are understood by non-engineering individuals.
  - iv. Explanation must be done both visually and verbally.
- b. Video Design - 15%
  - i. Effective usage of duration.
  - ii. Creative and modern video design.
  - iii. Clear content delivery.







# MECHANICAL ENGINEERING SCIENTIFIC COMPETITION

# TECHNICAL

1. Start by reading what is expected from you in this competition.  
(Refer to **MOTIVATION AND GUIDELINES**)
2. Design your product (using any **3D-CAD** design softwares).
3. Write your report.
4. Design your poster.
5. Upload your 3D-Design file, report, and poster to Google Drive and compile them into **one folder**.
6. Set the folder so that **ANYONE WITH THE LINK** can access it.
7. Submit your Google Drive link at [faith.petra.ac.id](http://faith.petra.ac.id). Follow the instructions at the website.
8. Wait for further instructions from the *FAITH INTERNATIONAL COMPETITION 2021* committee.



# MOTIVATION AND GUIDELINES

- 1.The competition’s challenge is to design a product which could optimize the implementation of COVID-19 health protocol or increase productivity during COVID-19 pandemic.
- 2.The target is clear: Create a product that will optimize the implementation of COVID-19 health protocol OR increase productivity during COVID-19 pandemic.
- 3.The expected product can be an improvement from existing products, but it would be preferable if the product is original and has never been known before.
- 4.Perspective of your design is important because it gives better perspective to the judges to see the originality, detail, and concept of your design.
- 5.Poster tells a story about your design concept, so its presentation affects the judges decision. You must try to make your poster so that it can be understood not only by the judges but ultimately also to many non-engineering individuals.
- 6.Try to add some complexity into the product to gain extra attention from the judges.
- 7.Place yourself as a designer and engineer at the same time, while clearing your personal vision. Use your personal experience to identify what people or healthcare needs nowadays, especially during COVID-19 pandemic.
- 8.Remember that there is also a winning category that challenges participants to get likes from Instagram posts of their poster. Therefore, make sure that your poster can pique viewer’s interest. Refer to **CHAPTER 3-V (INSTAGRAM CHALLENGE)**.



# REPORT REQUIREMENT

1. Report must be uploaded with file type : **PDF**
2. Report must contain **at least** :
  - a. Title
  - b. Purpose and Function of the product
  - c. Working Principles
  - d. Product Properties (Estimated size, weight, or materials used)
  - e. Explanation on how to use the product
  - f. Pictures of the product
3. Report must also include in-text citations when referring to a source. All references and in-text citations must be done in **APA** format.
4. Report Document Formatting:
  - a. Font : Times New Roman
  - b. Fontsize : 12 (Body)
  - c. Margins : 2.54 cm (All)
  - d. Spacing : 1.15
  - e. Size : A4



# DESIGN FILE REQUIREMENTS

## 1. Design Criteria :

- a. Must be a 3D (Three dimensional) design of the product.
- b. Uploaded file must be assembly.
- c. Set the material or the surface color of the Design as in the Report.
- d. All parts of the product must be shown clearly in the design. (i.e., nuts, bolts)

2. The Design File uploaded must be within file type : **.step, .igs, PARASOLID, or .pdf.**



# POSTER REQUIREMENT

1. Poster must be uploaded with file type : **PNG** (High resolution)
2. Poster size is A3 with no crop marks or transparent pixels. Maximum file size is 10MB.
3. Poster must contain **at least** :
  - a. Title
  - b. Function of the product
  - c. Summary of the how the product works
  - d. Charts and/or pictures
4. Poster must contain no more than 300 words, excluding the participants' names and the title of the poster.
5. The only personal information that is allowed to be presented in the poster is the name or the nickname of the designer.
6. **FAITH INTERNATIONAL COMPETITION 2021 logo** must be included in the poster. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)



# EVALUATIONS CRITERIA AND SCORING

## 1. Report and Overall Product Idea - 35%

- a. Purpose and Function of The Product - 10%
  - i. Correlation between the product and the competition topic.
  - ii. The functionality of the product.
  - iii. The impact which will be made by the product.
  - iv. The originality of the product.
- b. Working Principles - 10%
  - i. Basic theory explanation (physics, etc.).
- c. Product specifications - 5%
  - i. Realistic
  - ii. Good Selling Potential.
  - iii. Revolutionary.
- d. Explanation on How to Use The Product - 10%
  - i. Clear Explanation
  - ii. Easy to Understand.

## 2. 3D - Design - 35%

- a. Overall Design - 15%
  - i. Shown as Assembly.
  - ii. Portrays the product correctly.
  - iii. No design errors / blunders.
- b. Detail Attention - 20%
  - i. Material set as in report.
  - ii. Complexity of the design.

## 3. Poster - 30%

- a. Explanation - 15%
  - i. Poster gives clear explanations on the design and points out the "new" innovation in the design.
  - ii. Contents can be understood by non-engineering individuals.
- b. Poster Design - 15%
  - i. Easy to read
  - ii. Creative and modern styling



# ELECTRICAL ENGINEERING SCIENTIFIC COMPETITION



# TECHNICAL

1. Start by reading what is expected from you in this competition.  
(Refer to **MOTIVATION AND GUIDELINES**)

1. Design your product accordingly. (*Prototype is Optional, but highly scored if made*)

2. Design your poster and video.

3. Upload your poster and video to Google Drive and compile them into **one folder**.

4. Set the folder so that **ANYONE WITH THE LINK** can access it.

5. Submit your Google Drive link at [faith.petra.ac.id](http://faith.petra.ac.id). Follow the instructions at the website.

6. Wait for further instructions from the *FAITH INTERNATIONAL COMPETITION 2021* committee.



# MOTIVATION AND GUIDELINES

1. The competition's challenge is to design a product which could optimize the implementation of COVID-19 health protocol OR respond to some changes in Industry 4.0 revolution during COVID-19 pandemic.
2. Your product has to be based on the concept of Internet of Things, which basically means physical objects that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet.
3. The product should be original and has never been known before.
4. Try to add some complexity into the product to gain extra attention from the judges.
5. Place yourself as a designer and engineer at the same time, while clearing your personal vision.
6. If you choose to design a product to optimize the implementation of COVID-19 health protocol, use your personal experience to identify what people or healthcare needs nowadays, especially during COVID-19 pandemic.
7. If you choose to design a product to respond to some changes in Industry 4.0 revolution during COVID-19 pandemic, do some research about what is going on in the current industrial world and come up with a solution for the problems that occur.
8. The Poster and The Video basically should summarize your report in a creative way. Its presentation affects the decision of the judges. You must try to make your poster and video so that they can be understood not only by the judges but ultimately also to non-engineering individuals.
9. Remember that there is also a winning category that challenges participants to get likes from Instagram posts of their poster. Therefore, make sure your poster can pique viewers' interest.
10. Try to create a realistic product that has a future selling potential. If your product wins this competition, you might actually have a chance of improving your product and making profit out of it in the future.
11. Remember that there is also a winning category that challenges participants to get likes from Instagram posts of their poster. Therefore, make sure that your poster can pique viewer's interest. Refer to **CHAPTER 3-V (INSTAGRAM CHALLENGE)**.

# POSTER REQUIREMENT

1. Poster must be uploaded with file type : **PNG** (High resolution)
2. Poster size is A3 with no crop marks or transparent pixels. Maximum file size is 10MB.
3. Poster must contain **at least** :
  - a. Title
  - b. Function of the product
  - c. Summary of the how the product works
  - d. Charts and/or pictures
4. Poster must contain no more than 300 words, excluding the participants' names and the title of the poster.
5. The only personal information that is allowed to be presented in the poster is the name or the nickname of the designer.
6. **FAITH INTERNATIONAL COMPETITION 2021 logo** must be included in the poster. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)



# VIDEO REQUIREMENT

- 1.Video must be uploaded with file type : MP4.
- 2.Video resolution must be at least 360p and at most 720p.
- 3.The maximum file size of the video is 600 MB.
- 4.Video duration must be between 5 - 10 minutes.
- 5.Video must contain at least introduction of participants and explanation of the mechanism of the IoT product.
- 6.Participants must make an appearance in the video (not necessarily in the entire video).
- 7.Usage of artificial voice generators is **STRICTLY PROHIBITED**.
- 8.Any form of speech in the video must be done with clear pronunciation.
- 9.The only personal information that is allowed to be presented in the video is the name or the nickname of the video creators.
- 10.**FAITH INTERNATIONAL COMPETITION 2021 logo** must be included in the video. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)
- 11.The logo may be shown in the beginning, in the end, or during the entire video.



# EVALUATIONS CRITERIA AND SCORING

## 1. Product Idea - 50%

- a. Product - 20%
  - i. Correlation between the product and *Internet of Things*.
  - ii. The functionality of the product.
  - iii. The impact which will be made by the product.
  - iv. The originality of the product.
- b. Design of Product - 15%
  - i. The design of the product must be :
    - Thorough
    - Efficient
    - Clear
    - Considerate
  - ii. Added Complexity in the product.
- c. Manufacturing Possibilities - 15%
  - i. Realistic
  - ii. Possible
  - iii. Using standardized/common parts

## 2. Poster - 20%

- a. Explanation - 15%
  - i. Gives clear explanations on the concept design
  - ii. Points out the "new" innovation of the design
  - iii. Can be understood by non-engineering individuals
- b. Poster Design - 5%
  - i. Easy to read
  - ii. Creative and modern styling

## 3. Video - 30%

- a. Explanation - 20%
  - i. Summarizes the product idea and/or the prototype made
  - ii. Can give a better understanding to non-engineering individuals
- b. Video Design - 10%
  - i. Effective usage of video duration
  - ii. Creative and modern video styling
  - iii. Clear and easy to understand

# INFORMATICS SCIENTIFIC COMPETITION



# TECHNICAL

1. Start by reading what is expected from you in this competition. (Refer to **MOTIVATION AND GUIDELINES**)
2. Design your website.
3. Compress your website and all the supporting files into a .zip or similar extension.
4. Design your poster and video.
5. Upload your compressed website, poster, and video to Google Drive and compile them into **one folder**.
6. Set the folder so that **ANYONE WITH THE LINK** can access it.
7. Submit your Google Drive link at [faith.petra.ac.id](http://faith.petra.ac.id). Follow the instructions at the website.
8. Wait for further instructions from the *FAITH INTERNATIONAL COMPETITION 2021* committee.



# MOTIVATION AND GUIDELINES

1. The competition's challenge is to design a web-based application (website) that has high appeal and access potential during COVID-19 pandemic, accompanied by making a poster and a video to present the design and the mechanism of the web-based application created.
2. The contents of the web-based application must be about COVID-19. Here are some example topics that you can develop in your website:
  - a. Vaccine Education or Simulation
  - b. Travelling guide during COVID-19
  - c. HOAX prevention during COVID-19
  - d. Other interesting topics around COVID-19 that can be showcased in the web-based application
3. Start by asking these questions :
  - a. How many hours do people spend in a day surfing the internet ?
  - b. What do people search for the most regarding COVID-19 pandemic ?
  - c. What kind of COVID-19 related websites get a significant increase of visitors ?
  - d. What is new on COVID-19 ?
4. When you are building your website, remember that it has to be very interesting or maybe even ***mind blowing***. The reason behind this thought is that there are more than 1 billion websites out there, and you have to compete with a lot of them.
5. You are free to add all kinds of features on your website. You may use all of the available website programming languages.
6. Remember that you are not just building a website, but you are also showcasing the contents of your website too. Even though you do not have to focus entirely on the contents of your website, you still need to put some thought into them.



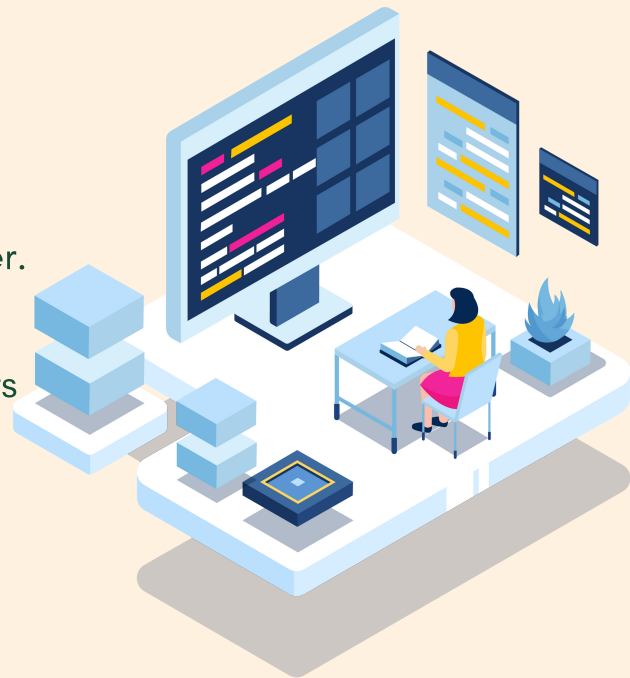
# MOTIVATION AND GUIDELINES

7. Make sure that your website and its contents are authentic, original, and new.
8. Make sure that your code is built and laid out properly since it is graded.
9. After finishing your website, you can start making your poster and video.
10. Your poster must contain screenshots of the highlights of your website. Explanations must be present in the poster in order to describe the images. You can also write down what you consider **mind blowing** and **brand new** about your website.
11. Your video must contain explanations on how to operate your website. This is an opportunity for your team to showcase the future and complexities that you have added on your website.
12. Try to create a realistic web-based application that has a future selling potential. If your web-based application wins this competition, you might actually have a chance of improving your product and make profit out of it in the future.
13. Remember that there is also a winning category that challenges participants to get likes from Instagram posts of their poster. Therefore, make sure that your poster can pique viewer's interest. Refer to **CHAPTER 3-V (INSTAGRAM CHALLENGE)**.



# WEBSITE REQUIREMENT

1. The Web Application must be compressed to 1 (one) file with .rar, .zip, or similar extensions. Unrecognized and inaccessible files will be deemed unacceptable for grading.
2. The Web Application must have a Responsive Web Design, which basically means that it can be optimally experienced on all devices. (e.g., Computers, Smartphones, Tablets, etc.)
3. The Web Application must contain at least :
  - a. A sign-in/sign-up page
  - b. A landing page
  - c. A home page
  - d. A header, a navigation bar, and a footer.
4. Optional features :
  - a. Live animations with difficult placements
  - b. Images with difficult placements  
(tilted, blended with others, etc.)
  - c. Pop Up Menus
  - d. Drop Down Menus
  - e. Hovering features  
→ e.g., showing gray color when cursor is hovered over a button
  - f. Adaptive image display  
→ e.g., size reduction of picture when a menu is opened next to it



# WEBSITE REQUIREMENT

5. The website will be hosted locally by the judges for grading purposes via XAMPP web server. Participants must consider the following :

a. Ensure that the database is compatible with the latest version of XAMPP.

b. The accepted extension for the database is .sql. In order to prevent mismatch and inaccessibility, please use the .sql format.

c. Ensure that when hosted, the back-end can be interacted with properly. To this end, local hosting via XAMPP is recommended.

i. Download XAMPP via this link :

<https://drive.google.com/drive/folders/168quzAoKOH04kT803vtI3kpN3RGBbFi0?usp=sharing>

ii. Follow the installation procedures.

iii. Open the XAMPP control panel and start Apache and MYSQL.

iv. Go to a web browser and open localhost/phpmyadmin.

v. Create a new database on the sidebar and name it as desired.

vi. Click import, and choose the desired .sql file, and choose charset utf-8. Click go.

vii. Your database is now locally hosted.

viii. To run your website locally, make sure that your website folder is inside the xampp/htdocs folder.

ix. Go to your web browser, and go to

localhost/xampp/htdocs/[folder name]. Your index page should be displayed by default.



# POSTER REQUIREMENT

1. Poster must be uploaded with file type : PNG (High resolution)
2. Poster size is A3 with no crop marks or transparent pixels.  
Maximum file size is 10MB.
3. Poster must contain **at least** :
  - a. Title
  - b. Function of the product
  - c. Summary of the how the product works
  - d. Charts and/or pictures
4. Poster must contain no more than 300 words, excluding the participants' names and the title of the poster.
5. The only personal information that is allowed to be presented in the poster is the name or the nickname of the designer.
6. **FAITH INTERNATIONAL COMPETITION 2021** logo must be included in the poster. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)



# VIDEO REQUIREMENT

- 1.Video must be uploaded with file type : MP4.
- 2.Video resolution must be at least 360p and at most 720p.
- 3.The maximum file size of the video is 500 MB.
- 4.Video duration must be between 3 - 7 minutes.
- 5.Video must contain at least introduction of participants and a demonstration of using the web-based application.
- 6.Participants must make an appearance in the video (not necessarily in the entire video).
- 7.Usage of artificial voice generators is **STRICTLY PROHIBITED**.
- 8.Any form of speech in the video must be done with clear pronunciation.
- 9.The only personal information that is allowed to be presented in the video is the name or the nickname of the video creators.
- 10.**FAITH INTERNATIONAL COMPETITION 2021 logo** must be included in the video. (Refer to **APPENDIX 2 - LOGO** in the **MASTER GUIDE BOOK**)
- 11.The logo may be shown in the beginning, in the end, or during the entire video.



# EVALUATIONS CRITERIA AND SCORING

## 1. Web-Based Application Design - 60%

- a. User Experience (UX) - 30%
  - i. Variety
  - ii. Functionality
  - iii. Satisfies the four elements of UX :
    - 1. Value
    - 2. Usability
    - 3. Adoptability
    - 4. Desirability
- b. User Interface (UI) and Design - 15%
  - i. Ease of navigation
  - ii. Appropriate choice of theme and layout
  - iii. Pleasing visual design
  - iv. Proper Scalability
- c. Code and Documentation - 15%
  - i. Clear and descriptive in-file documentation
  - ii. Efficiency of code and processes

## 2. Poster - 20%

- a. Explanation - 10%
  - i. Gives clear explanations on the website design
  - ii. Points out the "new" aspect of the website contents
- b. Poster Design - 10%
  - i. Easy to read
  - ii. Creative and modern styling

## 3. Video - 20%

- a. Video Content - 10%
  - i. Demonstrates the website operation completely.
  - ii. Exhibit the importance or the need of this website.
- b. Video Design - 10%
  - i. Effective usage of video duration
  - ii. Creative and modern video styling
  - iii. Clear and easy to understand

# INSTAGRAM CHALLENGE

1. Choose **one** of your team members to be the person to upload an instagram feed.
2. The instagram post will contain **only the poster** made by your team.
3. The upload period is 9 August 2021 – 13 August 2021.
4. Any uploads done past the upload period will be not be considered for judging
5. The challenge is to gather the most Likes in your post. This challenge will end on **14 August 2021**.
6. The caption of the post must follow this format :  
[FAITH INTERNATIONAL COMPETITION 2021]
  - TEAM ##
    - Member Name
    - Member Name
    - Member Name
7. The winner will be announced together on 16 August 2021.
8. Make sure to set your Instagram account to Public to allow FAITH International Competition 2021 committee members to check this challenge's posts.

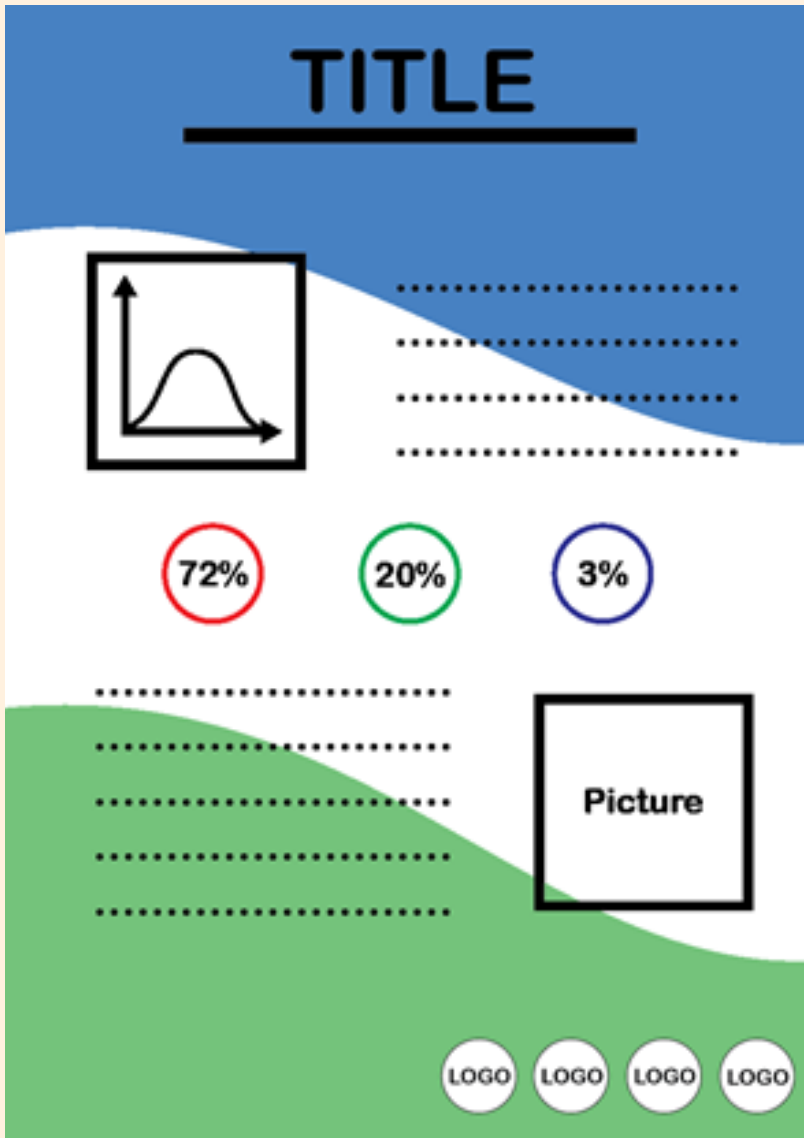


# APPENDIX 1

## ATTACHMENT EXAMPLES/FORMATTING

### A. EXAMPLES FOR INDUSTRIAL ENGINEERING COMPETITION

#### 1. Poster Example



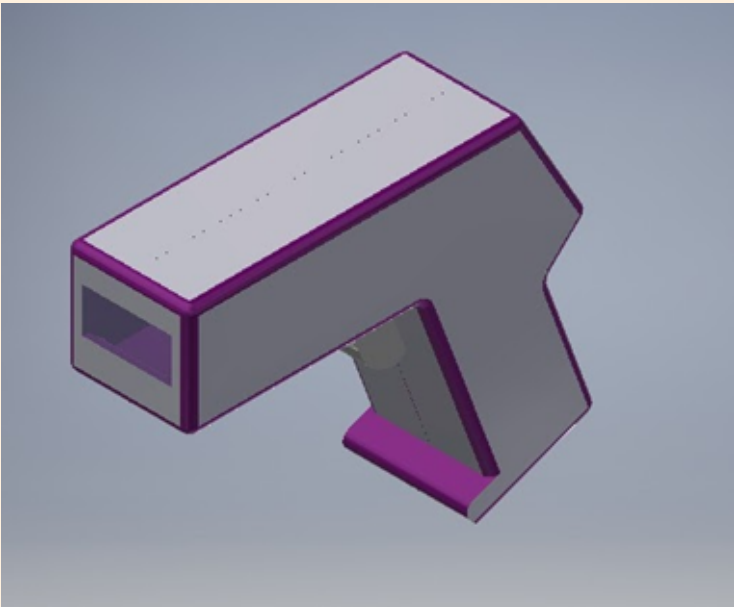


# APPENDIX 1

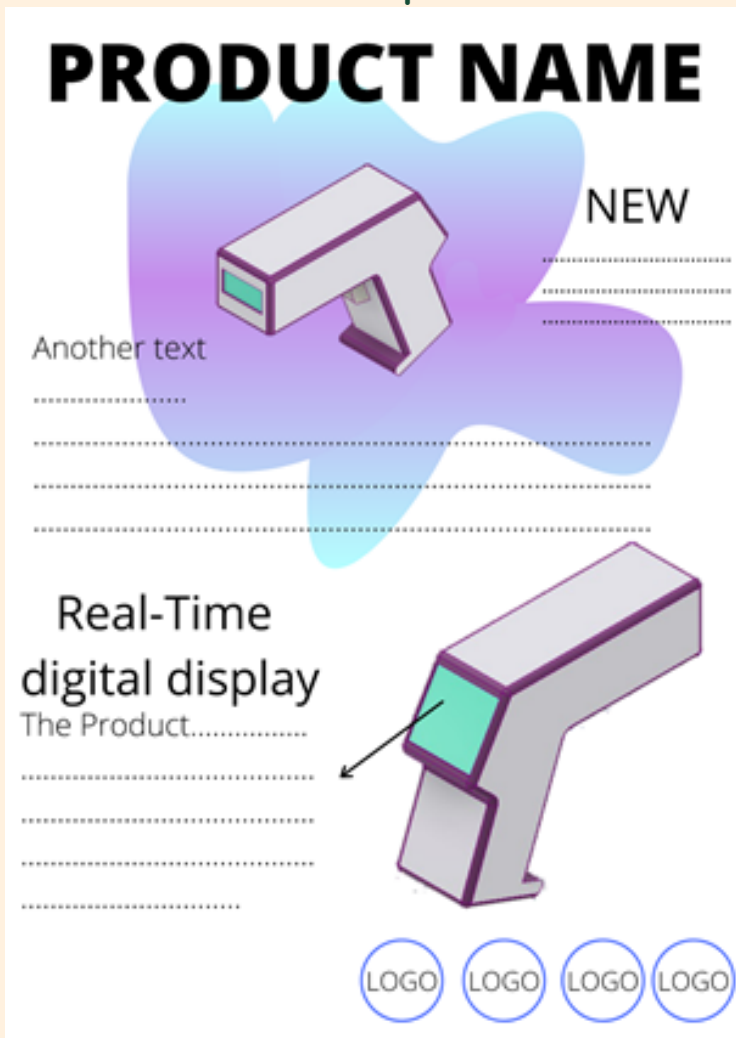
## ATTACHMENT EXAMPLES/FORMATTING

### B. EXAMPLES FOR MECHANICAL ENGINEERING COMPETITION

#### 1. 3D Design example



#### 2. Poster example



# APPENDIX 1

## ATTACHMENT EXAMPLES/FORMATTING

### C. EXAMPLES FOR ELECTRICAL ENGINEERING COMPETITION

#### 1. Poster Example

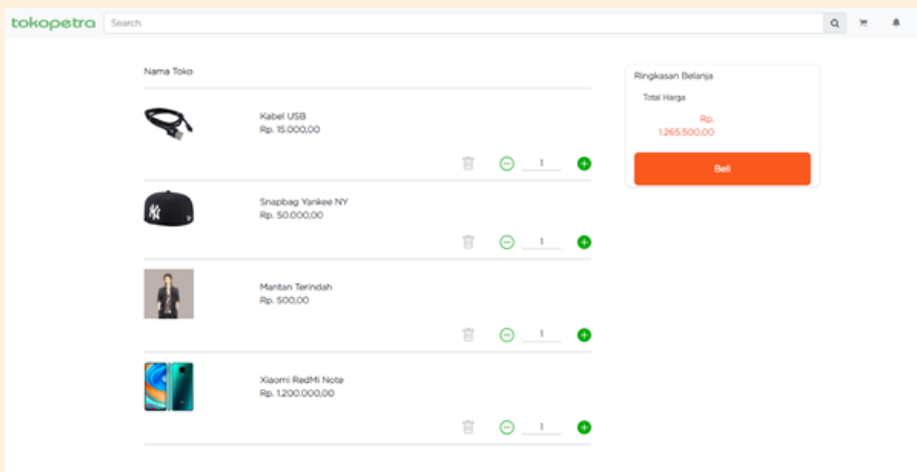
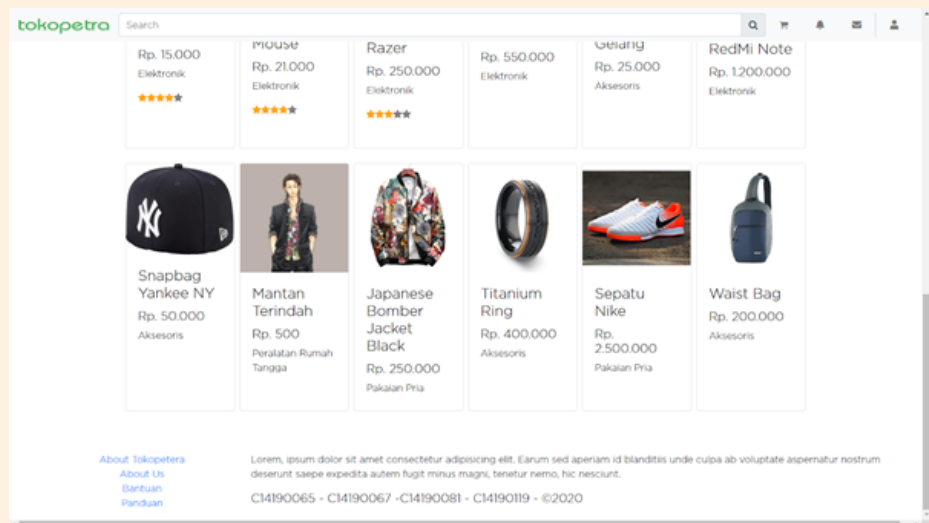


# APPENDIX 1

## ATTACHMENT EXAMPLES/FORMATTING

### D. EXAMPLES FOR INFORMATICS COMPETITION

#### 1. Website Screenshot Examples



### Sign In ×

Email address

Password

Remember password


[Forgot password?](#)

**SIGN IN**

Belum punya akun Tokopetra? [Daftar](#)

### Sign Up ×

First Name Last Name

Date of Birth  
mm/dd/yyyy 

Phone Number

Postal Code

Address

Account Number

Email address

Password

**SIGN UP**

## 2. Poster Example

**tokopetra**

**What is tokopetra?**

lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis sed erat, gravida id volutpat id. eticised at nulla. Nullam condimentum lacus vel, risus dapibus odio placerat id. Ut fringilla portt.



**Why tokopetra?**

- lorem ipsum dolor sit amet.
- consectetur adipiscing elit.
- Duis sed erat, gravida id volutpat id.
- Eticised at nulla.

**Take a look :**



**Pellesterque vehicula ligula sit amet dignissim lacinia.**

**Maecenas lki puz.**

# APPENDIX 2

## LOGO

**Here is the logo that you MUST attach to your posters and videos**



# FAITH

*Faculty of Industrial Technology  
International Competition*

**You can download the logo above from this link below :**

**<https://drive.google.com/drive/folders/1qPT5NvPo2YCfYvAHFDITP2K4QLG8NK9S?usp=sharing>**