



# UM STEM ACTIVITIES

## VIRTUAL CONVENTION OF MY STEM AMBASSADOR

30th November 2020 until 28th February 2021

Organised by: UM STEM Centre, UM in collaboration with UTM and UMS  
Supported by: Holistic Student Division, Higher Education Department, MoHE

An online ceremony for Virtual Convention of My STEM Ambassador was held on 9th December 2021 to provide a platform for university students to organise STEM event. This event was officiated by Prof. Dr. Mohd Cairul Iqbal Mohd Amin, Deputy Director General of Higher Education (Research & International), Department of Higher Education. In this virtual convention, we had webinars, dialogues, workshops, competitions, forums, and Virtual Science Fair.

PARTICIPANTS

**889**

UNIVERSITY STUDENTS

PARTICIPANTS

**325**

SCHOOL STUDENTS

In this convention, students are given the chance to take the lead on this program. Hence, they are able to use the opportunity to develop their soft skills, such as creativity, communication, critical thinking, problem-solving, leadership, and teamwork. It is also crucial to have the students' emotional and spiritual aspects balanced with the other elements of an individual's well-being. This program will help university to produce excellent quality students and graduates as they gain extensive knowledge and well-rounded experience in the co-curriculum.

Participants will gain extensive knowledge and insight into STEM education from different parts of the STEM field, such as in the fields of government, industry, academia, and NGOs. There is, indeed, plenty to reflect upon the ideas, information, interpretations, and visions.

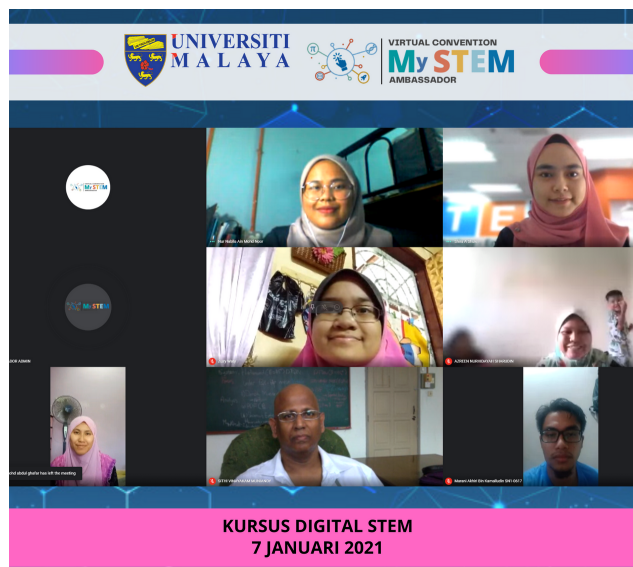
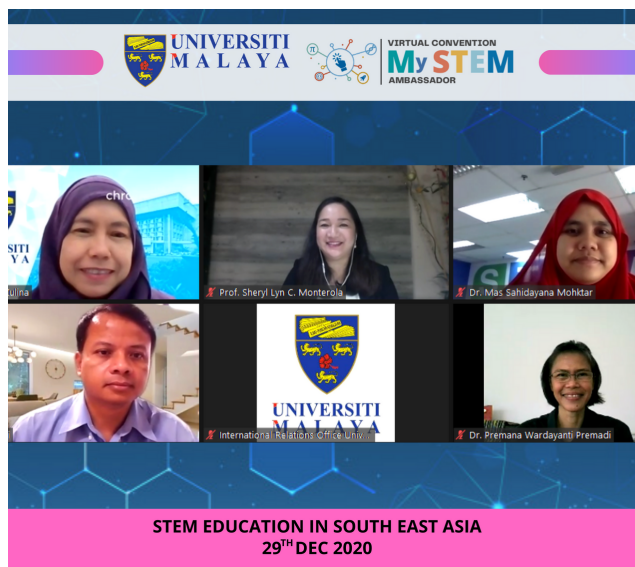


# VIRTUAL CONVENTION OF My STEM AMBASSADOR PROGRAM





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# VIRTUAL CONVENTION OF MY STEM AMBASSADOR PROGRAM

Please check  
out our  
Youtube Channel  
UM STEM Centre



Don't forget to subscribe!



## CONGRATULATIONS

### THE WINNERS OF MY STEM MCO CHALLENGE

PRIMARY SCHOOL			SECONDARY SCHOOL		
NO.	TITLE	SCHOOL	NO.	TITLE	SCHOOL
1	Membesarkan Rama-Rama by Amini Rahana Mohd Noor Badlishah	SK Jagra, Banting	1	Mimosa Putrika by Jackson Lu	SMK Katholik, Petaling Jaya
2	Tensigerty Structure by Ooi Yu Cheng	SJK Lee Rubber	2	Chemical Reaction of Sparkle by Khoo Elaine	SMK Tun Matan, Johor
3	Defying the Force of Gravity by Muhammad Aliq Almal Mohd Fahmi	SK Minden Height, Pulau Pinang	3	Magic Balloon by Jojo Wong Zing Zing	SMK St Anthony, Serikel
4	Microorganisms by Nur Amirah Abdul Rali	SRAI Sungai Manggih, Selangor	4	Kuaili Air Sungai by Ahmad Amin Najmi	SM Sains Muzaffer Syah, Malacca
5	Cleaning Corps by Adeenn Batriyya Mohd Haeppolmuddin	SK Zainab 2 Kota Bharu, Kelantan	5	DIY Alveolus Model Priscilla Wong Shi Yan	SMK St Anthony, Serikel
6	Coconut Shell Lamp by Sharwin A/L K Kalithas	SJK Kuangkar Pulau, Johor Bahru	6	Homopolar Motor by Ooi Yu Xuan	SMK Chong Hwa, Kuala Lumpur

UNIVERSITY / COLLEGE			PUBLIC		
NO.	TITLE	UNIVERSITY / COLLEGE	NO.	TITLE	WINNER
1	Fibonacci Code by Rhuaniethwan Sivalarman	Selangor Matriculation College	1	Amphibian Car	Soo Weng Choe
2	Egg Drop Challenge by Hanna Izzah Binti Sahronan	Selangor Matriculation College			
3	Infrared Thermometer by Ong Khai Sang	Universiti Utara Malaysia			
4	Twiglit by Nur Izzah Izzati Binti Mohd Zulfari	Selangor Matriculation College			
5	The Secrets of Farns by Khoo Yvonne	Selangor Matriculation College			
6	Bacteria Cultures On Giant Agar by Fatin Sabrina binti Mohd Rashid	Universiti Kebangsaan Malaysia			
7	DIY Hydraulic Bridge by Puteri Aiman Nughah Binti Zubairan	Banting Polytechnic, Selangor			





# VIRTUAL SCIENCE FAIR

22nd February until 18th April 2021

Organised by: UM STEM Centre

In conjunction with Virtual Convention My STEM Ambassador

## Opening ceremony of VSF merged with closing ceremony of VCMSA

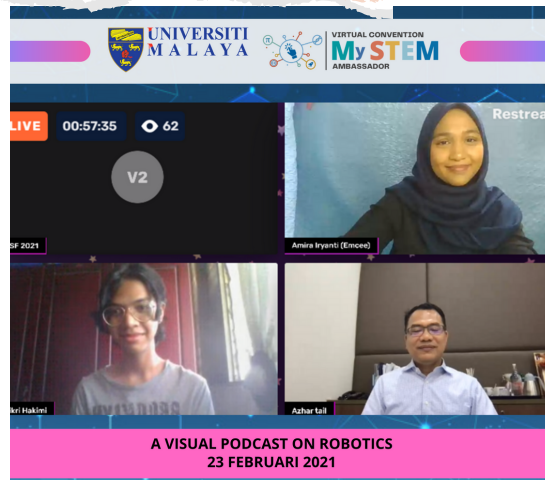


Virtual Science Fair 2021 (VSF) involves various levels of society including students from the Faculty of Science of Universiti Malaya, the management team, and the local community of various age groups.



The event collectively intended to bring a fresher perspective of Science for current students (from various levels; secondary, pre-university and undergraduates) and future graduates in preparing themselves for industrial needs. By having series of events under one fair, all skillsets especially pertaining to Science is brought to the maximum potential and enculturing Science awareness amongst the community.

# Career Fair VSF X VCMSA



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out our  
Youtube Channel  
UM STEM Centre**

Don't forget to  
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# Mini Theater STEM Competition



## Selangor 2020

July until December 2020

17th March 2021 (Closing ceremony)

**Organised by: National STEM Association (NSA) dan UM STEM Centre  
in collaboration with The Selangor State Government**

Mini Theater STEM Competition Selangor 2020 was held since 2019 as a first step in identifying and unearthing STEM talents and skills among the secondary school students. This competition focuses on individual identified skills such as cooking, repairing electrical or electronic equipment and agricultural like gardening which very much in line with core of STEM Education. Target group for this competition is secondary school students from B40 community.

Main objective of this program is to ensure that they can be guided to become high quality prosumers, innovators, entrepreneurs, and researchers who can generate income to help support their family members. The Closing Ceremony and Announcement of the Winners of Mini Theater STEM Competition 2020 was held on 17th March 2021 via online platform. The closing ceremony was officiated by YAB Dato' Seri Amirudin Shari, Chief Minister of Selangor.



## Congratulations

1st Stage

### 1. SMK PUCHONG UTAMA 1

Ergonomic H2O Saver Tap

### 2. SMK BANTING

Edible Water Molecular Gastronomy Project

### 3. SMK SERI SERDANG

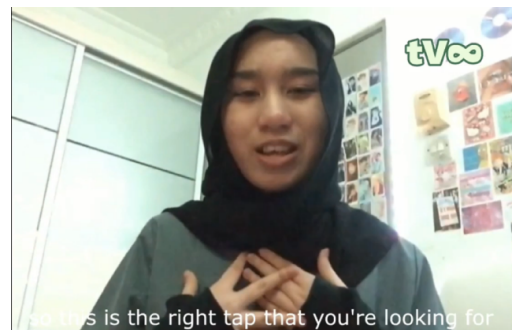
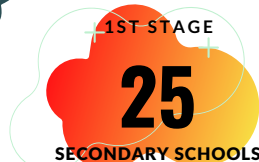
Anteena (Bacteria's worst nightmare)

### 4. SMK SERI GARING TEAM B

COV-SSC1 (COVID-19 Smart Swab Chair 1)

### 5. SMK KHIR JOHARI

FOOD WASTE MANAGEMENT: "WANT NOT WASTE NOT"



2nd Stage

### 1. SMK IDEAL HEIGHTS

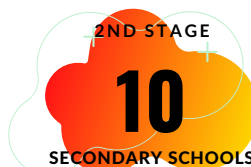
Flexygon: biodegrade spoon and eco-friendly

### 2. SMK SERI GARING

Terma jam (watermelon and dates)

### 3. SMK RAWANG

KREPSTER (from jackfruit)



# 2020 Samsung Solve for Tomorrow - **FIXIT**

9th October – 17th Dec 2020

Organised by: Samsung Malaysia Electronics in collaboration with  
Universiti Malaya

KELAB SAHABAT UM

# 45

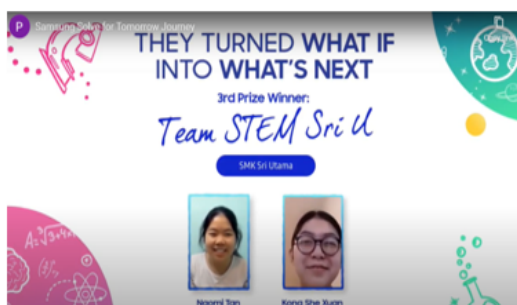
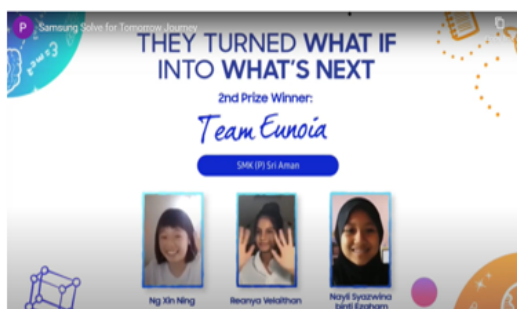
SCHOOLS

## Objective:

The competition aimed at stimulating curiosity and cultivating interest in Science, Technology, Engineering and Mathematics (STEM) education, while inspiring students to help improve and fix issues faced by local communities through STEM's innovative solutions.

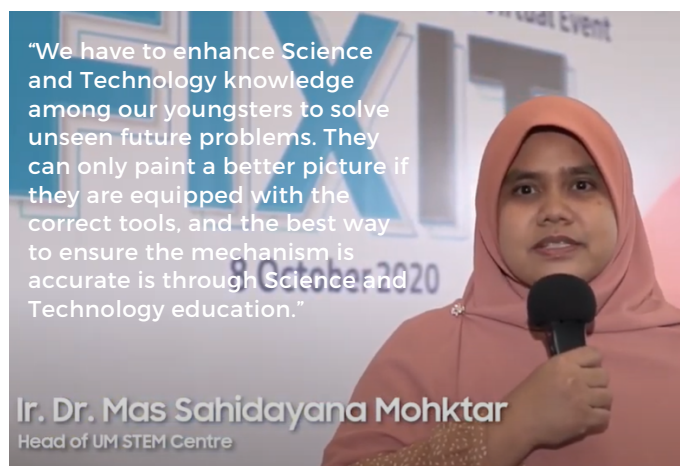
Please visit this website for more info:  
<https://www.samsung.com/my/solvefortomorrow/>

# Congratulations



"It is important for the next generations to come to be equipped with the fundamental skills, knowledge and attitudes needed to adapt to the technological change and benefit from the new opportunities technology creates. We believe in their potential to reach new heights of innovation, and to develop society-changing solutions. And Samsung is committed to helping them achieve this through the educational programs we run like Solve for Tomorrow"

**Dato' Roh Jae Yeol**  
Director of Corporate Affairs  
Samsung Malaysia Electronics



"We have to enhance Science and Technology knowledge among our youngsters to solve unseen future problems. They can only paint a better picture if they are equipped with the correct tools, and the best way to ensure the mechanism is accurate is through Science and Technology education."

**Ir. Dr. Mas Sahidayana Mohktar**  
Head of UM STEM Centre



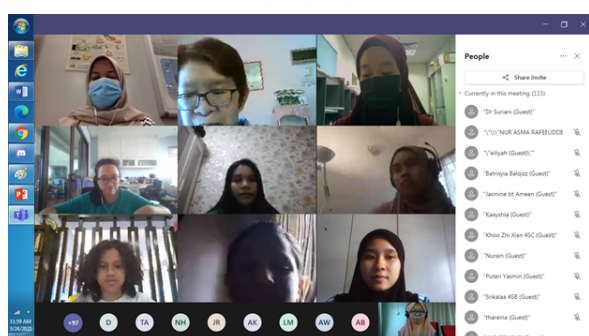
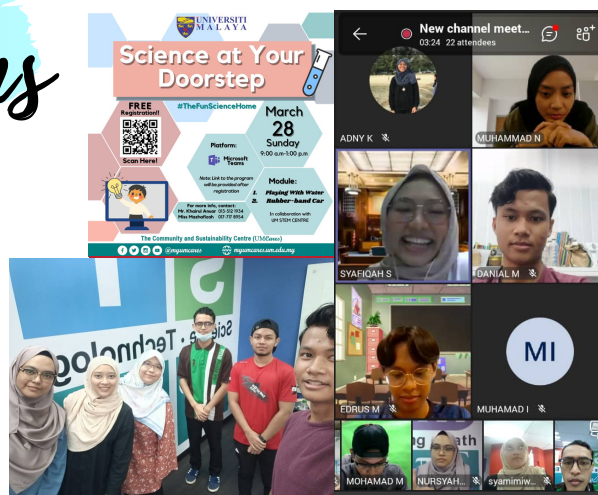
# STEM Programs

Science at Your Doorstep

28th March 2021

Platform: MS Teams

Organised by: UMCares in collaboration with UM STEM Centre



Seminar Sensor Gas dan Aplikasinya dalam Kehidupan - SMK (Perempuan) Sri Aman  
24th March 2021

STEM Coordinator: Dr. Suriani Ibrahim,  
Department of Mechanical Engineering,  
Faculty of Engineering

Teacher Academic staff meet-up. 3rd February 2021. SMK Seri Pantai

STEM Coordinator: Dr. Thamil Selvi A/P Velayutham

Organised by: Department of Physics, Faculty of Science

Cabaran Statistik/Matematik Peringkat Kebangsaan 2020 Kali Pertama (ISMchallenge-I 2020)  
7th Dec 2020 - 15th Jan 2021

STEM Coordinator: Assoc. Prof. Dr Zailan Bin Sir

Organised by: Institute of Mathematical Sciences, Faculty of Science & Institute of Statistics Malaysia (ISMy)

JOIN US!

## More events!

Centre for Innovative Construction Technology (CICT) Innovation Day 2021.

29th May 2021. Online

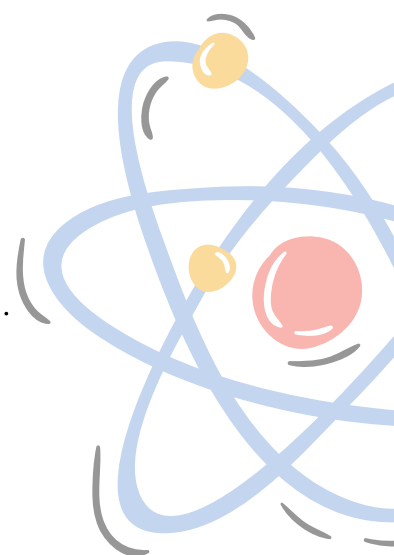
Organised by: CICT and Faculty of Engineering, UM

Supported by: UMCares and UM STEM Centre

2021 Solve for Tomorrow. May - November 2021. Online

Organised by: Samsung in collaboration with UM STEM Centre

Sponsored by: Samsung Electronics Malaysia (SME) Sdn. Bhd.



JOIN US!

# More events!

MARCH - NOVEMBER 2021

## BIEA 2021 INTERNATIONAL STEM YOUTH INNOVATION COMPETITION

(RE)PACK TO RESTORE OUR WORLD

PLATFORM: ONLINE

OPEN FOR ALL STUDENTS AGED 9 - 21

SUPPORTED BY MINISTRY OF EDUCATION

<https://bieacompetition.org.uk/2021-competition/>



## VIRTUAL SCIENCE FAIR 2021

PLEASE VISIT: FB UM VIRTUAL SCIENCE FAIR 2021



JANUARY - DECEMBER 2021

## PROGRAM MINI TEATER STEM SELANGOR & KELANTAN

ORGANISED BY: NATIONAL STEM ASSOCIATION & UM STEM CENTRE IN COLLABORATION WITH STATE GOVERNMENT (SELANGOR & KELANTAN)  
TARGET: SECONDARY STUDENTS



25TH MAY 2021

## 3RD INTERNATIONAL STEM SEMINAR 2021 (ISS 2021)

ORGANISED BY: CENTRE FOR FOUNDATION STUDIES IN SCIENCE UNIVERSITI MALAYA, IN COLLABORATION WITH UM STEM CENTRE AND NATIONAL STEM ASSOCIATION (NSA)  
VISIT: [HTTPS://UMEVENT.UM.EDU.MY/ISS2021](https://umevent.um.edu.my/ISS2021)



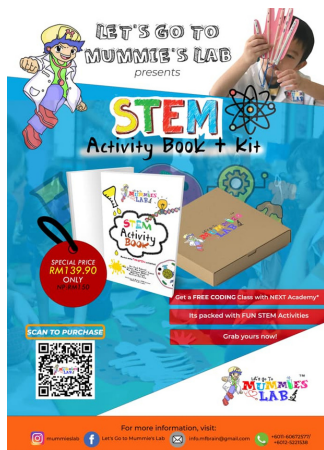


# **PUBLICATIONS**

Sale  
**10%**



Sale valid until 31th Dec 2021



## STEM ACTIVITY BOOK & Kit

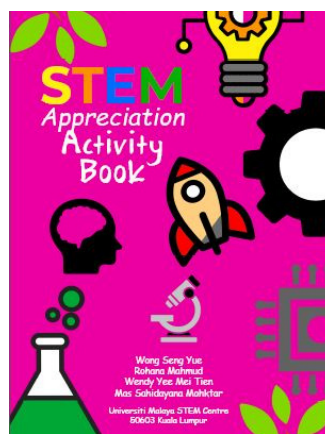
Book only (9 modules): RM 45 (NP: RM 50)  
STEM kit only (6 modules): RM 90 (NP: RM 100)  
Package- Book & Kit: RM 125.90 (NP: RM 139.90)  
\*All prices are exclude postage

## STEM APPRECIATION ACTIVITY BOOK

Price (10 modules): RM 45 (NP: RM 50)

\*Exclude postage

This book is the output from the GIX1004  
STEM Appreciation subject offered by  
CITra Universiti Malaya.



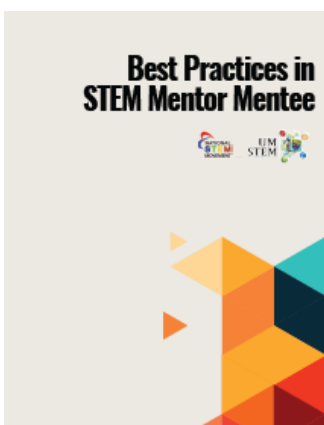
## Best Practices in STEM Mentor Mentee

## BEST PRACTICES IN STEM MENTOR MENTEE

Price: RM 45 (NP: RM 50)

\*Exclude postage

Compilation of research paper presented  
at The 1st National STEM Seminar 2018.

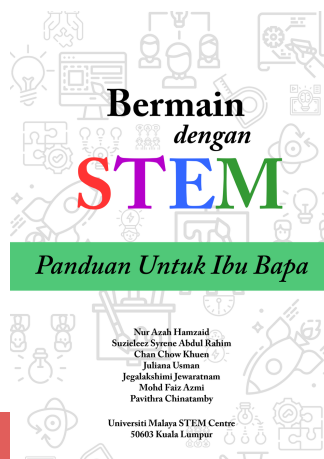


## BERMAIN DENGAN STEM

Price: RM 27 (NP: RM 30)

\*Exclude postage

Panduan untuk Ibu Bapa berkaitan  
STEM



# UM STEM Centre members

**Ir. Dr. Mas Sahidayana Mohktar**

Head, UM STEM Centre

**Prof. Dato' Dr. Noraini Idris**

Honorary Professor & Advisor

**Prof. Dato' Dr. Mohd Jamil Maah**

Honorary Professor & Advisor

## STEM Representatives

**Dr. Hidayah Mohd Fadzil**

Deputy Head (I)

Dept. of Mathematics and Science  
Education, Faculty of Education

**Dr. Mahanom Jalil**

Deputy Head (II)

Division of Biology  
Centre for Foundation Studies in Science

**A.P. Dr. Sarinder Kaur  
A/P Kashmir Singh**

Institute of Biological Sciences  
Faculty of Science

**A.P. Dr Woon Kai Lin**

Dept. of Physics  
Faculty of Science

**A.P. Dr. Vannajan  
Sanghiran Lee**

Dept. of Chemistry  
Faculty of Science

**Dr. Amira Sariyati Firdaus**

Dept. of Media and Communication Studies  
Faculty of Arts and Social Sciences

**Dr. Nor Aishah Abdullah**

Dept. of Science and Technology  
Studies, Faculty of Science

**Sr. Raha Binti Sulaiman**

Department of Building Surveying  
Faculty of Built Environment

**Mr. Norhafizan Bin  
Ahmad**

Dept. of Mechanical Engineering  
Faculty of Engineering

**Dr. Jadeera Cheong  
PhaikGeok Binti Abdullah**

Centre for Sports and Exercise Sciences

**Dr. AzahAnir Binti Norman**

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Faculty of Computer Science &  
Information Technology

**A. P. Dr. Yong Chen Chen**

Department of Economics  
Faculty of Economics and Administration

**Dr. Azlin Zaiti Zainal**

Department of English Language  
Faculty of Languages & Linguistics

**Dr. Kartini Binti Abdul Jabar**

Department of Medical Microbiology  
Faculty of Medicine

*Office*

## MICROSOFT- UM STEM Learning Space



### Contact us:

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In affiliation:

**NATIONAL  
STEM  
ASSOCIATION**

**Social Advancement  
& Happiness  
Research Cluster  
Universiti Malaya**



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