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“Optimizing Innovation in Knowledge, Education and Design”

EXTENDED ABSTRACT



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CATEGORY: CSP YOUNG INVENTOR

- | | | |
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CATEGORY: CST YOUNG INVENTOR

- | | | |
|----|--|---------|
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Assalamualaikum warahmatullahi wabarakatuh,



First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality. I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services. By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality. I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH



WELCOME MESSAGE (i-SPIKE 2023 CHAIR)



We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPIKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPIKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail

Chair

3rd International Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023)

SAD NATURE BAG

Nurul Hazirah Amani binti Hafizal
Sekolah Menengah Kebangsaan Sri Perak
ajaznulaish@gmail.com

Khursiah Nur binti Mohamad Amin
Sekolah Menengah Kebangsaan Sri Perak
ajaznulaish@gmail.com

Nurulhuda Insyirah binti Khairol Maizi
Sekolah Menengah Kebangsaan Sri Perak
ajaznulaish@gmail.com

SAD NATURE BAG merujuk kepada **STOP AGAINTS DESTROYING NATURE BAG** merupakan satu inovasi untuk mengelakkan kemusnahan alam sekitar. **SAD NATURE BAG** ini juga menggunakan bahan yang boleh dikitar semula dan bahan yang tidak memudaratkan alam sekitar secara menyeluruh.

Selain itu, **SAD NATURE BAG** ini mampu mengurangkan penggunaan beg plastik dan beg kertas yang mencemarkan alam sekitar secara berleluasa dengan fungsinya yang unik dan rupa bentuknya yang menarik. Seterusnya, **SAD NATURE BAG** juga boleh disimpan dengan baik selepas digunakan dan tidak memerlukan ruang yang besar untuk penyimpanan. **SAD NATURE BAG** juga mudah dibawa ke mana sahaja dan boleh digunakan berulang kali serta tahan lama jika dibandingkan dengan beg plastik dan beg kertas.

PERNYATAAN MASALAH

Dalam era ini, penggunaan beg plastik di Malaysia telah mencecah sebanyak 148 000 tan metrik pada 2021 dan 1 bilion tan metrik pada tahun 2023 di seluruh dunia. Selain itu, kumpulan sasaran projek kami ialah masyarakat, pelajar dan murid. Hal ini kerana punca permasalahan alam seperti pencemaran laut dan banjir kilat terjadi akibat kecuaiannya manusia itu sendiri.

Manusia yang tidak mempunyai sifat ihsan terhadap alam sekitar membuang sampah-sarap termasuk beg plastik yang menyebabkan pencemaran laut dan banjir kilat yang berleluasa hinggalah hal ini tidak dapat dibendung. **SAD NATURE BAG** ini dicipta supaya penggunaan plastik dalam kehidupan harian manusia dapat dielakkan secara menyeluruh.

OBJEKTIF KAJIAN

SAD NATURE BAG dicipta untuk mengatasi masalah seperti banjir kilat dan keselamatan haiwan akuatik yang semakin terancam.

SAD NATURE BAG ini juga memudahkan orang ramai membeli barangan keperluan harian seperti makanan dan bahan mentah seperti ayam, daging dan ikan.

SAD NATURE BAG dicipta untuk mengurangkan penggunaan beg plastik dan beg kertas.

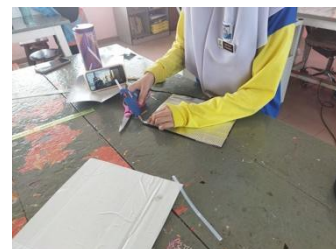
METODOLOGI/PROSEDUR KERJA



LANGKAH 1
PEMOTONGAN KOTAK



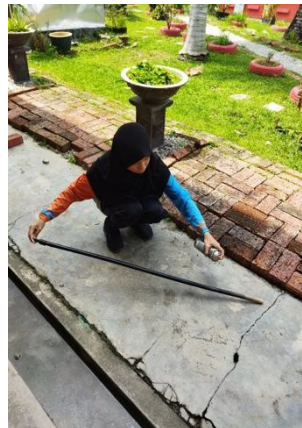
LANGKAH 2
PEMASANGAN
WALLPAPER LUAR



LANGKAH 3
PEMASANGAN
KERTAS ALUMINIUM



LANGKAH 4
PEMASANGAN
WALLPAPER DALAM



LANGKAH 5
MENYEMBUR CAT
HITAM PADA BATANG
PENYAPU



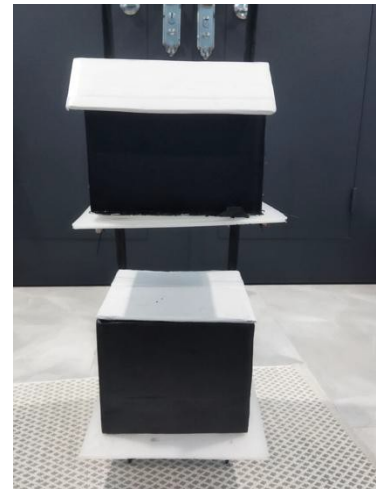
LANGKAH 6
PEMOTONGAN
BAHAGIAN BAWAH
TROLI



LANGKAH 6
PEMOTONGAN
BAHAGIAN BAWAH
TROLI



LANGKAH 7
MEMASANG BATANG
PENYAPU SEBAGAI
PEMEGANG



HASIL

KEPUTUSAN DAN PERBINCANGAN

SAD NATURE BAG mempunyai dua bahagian yang dapat memudahkan masyarakat membeli barangan keperluan harian. Hal ini kerana ia mempunyai aras atas yang kedap haba aras bawah tidak kedap haba. Aras bawah berfungsi untuk mengekalkan kesegaran bahan mentah seperti udang, daging dan ayam manakala aras atas untuk meletakkan bahan-bahan kering.

Aras atas beg ini menggunakan magnet bertujuan untuk memudahkan pengguna menyimpannya di tempat yang sempit. Pengguna boleh membuka dan memasangnya semula dengan adanya magnet ini. Seterusnya, beg ini sesuai digunakan oleh orang ramai kerana ia tidak terlalu berat dan mesra pengguna.

KESIMPULAN

SAD NATURE BAG adalah inovasi yang mampu memelihara alam sekitar daripada pencemaran beg plastik dan beg kertas. Ia juga boleh digunakan berulang kali dan mudah disimpan kerana tidak memerlukan ruang yang besar untuk penyimpanan.

SAD NATURE BAG juga mesra pengguna kerana dapat dibawa dan disimpan di dalam kereta kerana boleh dipisahkan aras atas dan aras bawah. Selain itu, **SAD NATURE BAG** sangat efektif kerana ia mempunyai dua aras yang mempunyai fungsi yang berbeza.

Roda pada **SAD NATURE BAG** ini memudahkan ia berfungsi dengan baik. **SAD NATURE BAG** juga boleh digunakan oleh pelbagai golongan masyarakat kerana ia mampu milik dan menggunakan bahan kitar semula untuk dihasilkan.

RUJUKAN

<https://www.statista.com/topics/5401/global-plastic-waste/>

<https://www.bharian.com.my/berita/nasional/2021/03/795734/p>

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