

**BORANG PERMOHONAN  
FESTIVAL INOVASI UNIVERSITI TEKNOLOGI MALAYSIA (UTM) 2024****BAHAGIAN 1 : DEMOGRAFI INDIVIDU / KUMPULAN**

PERKARA	BUTIRAN YANG PERLU DIISI DAN DILENGKAPKAN OLEH PEMOHON		
<b>KETUA KUMPULAN</b>	<b>NAMA :</b> HILMI BIN ABDUL RAHMAN <b>JAWATAN :</b> Kumpulan A dan JUSA : 41 ke atas <b>NO. PEKERJA :</b> 15695 <b>EMEL :</b> hilmi.abdulrahman@utm.my <b>NO. TEL. BIMBIT :</b> 0176970455		
<b>MAKLUMAT AHLI KUMPULAN</b> (senarai semua nama ahli Kumpulan (sama sepertimana dalam Kad Pengenalan))	<b>NAMA AHLI KUMPULAN</b>	<b>KOD JAWATAN</b>	<b>NO PEKERJA/MATRIK</b>
	Zaidah Binti Rahmat	DS52	9394
	Mohd Haziq Bin Mohd Toha	CA29	14255
	Mohd Azhari Bin Kamaruddin	F32	9212
	Muhammad Roslan Bin Mohd Razali	JA29	17045
	Norlin Binti Arsad	C38	11701
	Noorazielahanim Binti Zolkopli	C29	14329
	Nor Laili @ Md Noor Bin Ahmad	J29	8642
<b>TAJUK PROJEK YANG DICADANGKAN</b>	<b>EAZYGAS</b>		

**BAHAGIAN 2 : MAKLUMAT PROJEK**

<b>NAMA KUMPULAN</b>	The Gas Gang
<b>TARIKH KUMPULAN DITUBUHKAN</b>	10/1/2022
<b>NAMA PUSAT TANGGUNGJAWAB</b>	JABATAN TIMBALAN NAIB CANSOLOR (PENYELIDIKAN & INOVASI)
<b>RINGKASAN PROJEK</b>	Unit pengurusan bahan kimia (CMU) adalah unit yang menjalankan fungsi mengurus bahan kimia di dalam universiti. Pengurusan gas adalah satu inisiatif baharu CMU bagi memastikan keselamatan, perolehan, dan kompetensi staf dalam menguruskan silinder gas. Bagi memastikan pengurusan gas ini berjalan dengan lancar, pembangunan pangkalan data dilihat adalah amat penting. Pangkalan data sedia ada dilihat lebih menyendiri dan mempunyai beberapa masalah seperti tiada data menyeluruh, pemilikan silinder, tempoh keberadaan silinder dan sebagainya. Oleh yang demikian, sistem secara atas talian (EAZYGAS) dilihat lebih strategik dalam memastikan data yang tepat, mudah untuk di akses, penjimatan kos, peningkatan produktiviti dan penjimatan masa.

**BAHAGIAN 3 : TAHAP KESEDIAAN TEKNOLOGI (TRL)**

<b>TAHAP KESEDIAAN PROJEK</b>	TRL 8 : Sistem lengkap dan memenuhi syarat melalui ujian dan demonstrasi
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**BAHAGIAN 4 : PERINCIAN**

1	<p><b>ORIGINALITY / KETULENAN</b>  <b>Describe the originality of your idea / Terangkan keaslian idea anda</b></p> <p>EazyGas has been officially registered for copyright protection, recognizing its originality as a unique intellectual property. This registration ensures that the distinctive elements of EazyGas, including its concept, branding, design, and any associated materials, are legally protected from unauthorized use or replication. Copyright safeguards the creative aspects of EazyGas, affirming that it is an original work that cannot be copied or used without permission, giving the owners exclusive rights to its use and distribution.</p> <p><b>LAMPIRAN :</b></p>
2	<p><b>PROBLEM STATEMENT / PENYATAAN PERMASALAHAN</b>  <b>Define the problem your project addresses / Nyatakan masalah yang ditangani oleh projek anda</b></p> <p>All gas activities and management are carried out separately according to their respective departments (PTJ). The main issue with separate systems is the lack of a comprehensive database containing the quantity and types of gas cylinders within the university. This data is crucial for precise knowledge of cylinder quantities, their duration of existence, hazardous locations, and the appropriate control measures to be taken at the involved sites. Gas cylinders contain highly hazardous risks such as fire, explosion, toxicity, asphyxiation, fainting, and more. The intended control measures include aspects of training and methods to reduce accident risks.</p> <p>Centralizing data enables more comprehensive and relevant monitoring, not only from a safety standpoint but also, more critically, from a financial perspective. Several common problems arise without a centralized database, namely:</p> <p>I. Abandoned gas cylinders by lecturers who leave the service. II. Gas cylinders rented but not used. III. Gas cylinders with unknown owners due to lack of records. IV. Changes in cylinder locations and placements complicate the return process, leading to suppliers continuously maintaining rental charges for cylinders.</p> <p>The use of manual systems for gas data entry is found to have several issues, including the time taken by staff to input data, staff not updating gas data, and difficulty in accessing data if any gas-related issues arise.</p> <p><b>LAMPIRAN :</b></p>
3	<p><b>TECHNOLOGY/ TEKNOLOGI</b>  <b>Explain the technology and potential IP status / Terangkan teknologi dan status harta intelek yang berpotensi</b></p> <p>IP/CR/05858 - Sistem Pangkalan Data Silinder Gas (EAZYGAS) (Drafted)</p> <p><b>LAMPIRAN :</b></p>
4	<p><b>APPLICABILITY / APLIKASI</b>  <b>Explain the applicability of your project to the sector / Terangkan kebolehlaksanaan projek anda kepada sektor</b></p> <p>This system has been used to the PTJ related to the uses of gases.</p> <p><b>LAMPIRAN :</b></p>
5	<p><b>INNOVATIVENESS / INOVASI</b>  <b>Describe how your project is innovative / Terangkan bagaimana projek anda adalah inovatif</b></p> <p>EAZYGAS is an online database website that enables users to upload gas information in their laboratories. Users must sign up first before being allowed to log in. Upon logging in, users can view a dashboard display detailing gas particulars under their jurisdiction. Furthermore, users can also place orders for incoming and outgoing gas, review their products, and check their gas inventory.</p> <p>For administrators, user management, product, department, lab, gas, supplier, order, and inventory management are available. Regarding orders, administrators will receive notification requests from users and can either approve or reject these orders. Once an order is approved, the company will receive an email containing order details from the administrator to proceed with the purchase.</p> <p><b>LAMPIRAN :</b></p>

6	<p><b>IMPACT / KESAN</b>  <b>Describe the impact of your project on the (sector/ university/ state/ national/ international level) Terangkan kesan projek anda kepada (sektor/ university/ negeri/ nasional/ internasional)</b></p> <p>The use of a system in industries offers various significant benefits. This system allows for a more organized and efficient purchasing process, reducing the likelihood of delays in obtaining raw materials or necessary services. Additionally, a well-structured system enables better inventory management, avoiding unwanted stock shortages or surpluses</p> <p>With a properly organized system, companies can enjoy lower costs in purchasing raw materials as it facilitates better price negotiation with suppliers and overall procurement optimization. Moreover, it streamlines expenditure monitoring and allows for a more systematic assessment of supplier performance, making the procurement process more transparent and advanced for industries. Automation of gas related task can reduce manual errors, saving both time and resources. Real time monitoring of gas usage allows for better resources planning and optimization, preventing unnecessary wastage and ensuring that resources are used judiciously. These systems can provide comprehensive data analytics and reporting, offering insight into gas consumption patterns, trend, and areas for potential improvement.</p> <p><b>LAMPIRAN :</b></p>
7	<p><b>TEAMWORK / KERJASAMA PASUKAN</b>  <b>Describe the teamwork involved in your project / Terangkan kerjasama yang terlibat dalam projek anda</b></p> <p>Teamwork at Eazygas thrives on clear communication, defined roles, and a collaborative mindset, where every member works toward shared goals. Trust and accountability are crucial, as team members rely on each other to complete tasks and adapt to changes. Flexibility, conflict resolution, and learning from both successes and failures help ensure growth and improvement. Celebrating achievements keeps morale high, creating a supportive and productive environment for everyone involved.</p> <p><b>LAMPIRAN :</b></p>
8	<p><b>POTENTIAL MARKET / KEBOLEHPASARAN</b>  <b>Describe the potential market for your project / Terangkan pasaran potensi untuk projek anda</b></p> <p>Government University, Private University, Industry Related to Gas Usage Retails IndustryGovernment University, Private University, Industry Related to Gas Usage Retails Industry</p> <p><b>LAMPIRAN :</b></p>
9	<p><b>COMMERCIALIZATION PLAN / PERANCANGAN PENGKOMERSILAN</b>  <b>Outline the commercialization plan for your project / Gariskan rancangan pengkomersialan untuk projek anda</b></p> <ol style="list-style-type: none"> <li>1. Idea</li> <li>2. System development</li> <li>3. Data Entry</li> <li>4. Testing</li> <li>5. IP register</li> <li>6. Marketing</li> <li>7. Licensing</li> <li>8. Commercialization</li> </ol> <p><b>LAMPIRAN :</b></p>

## PERAKUAN DAN PENGESAHAN PENYERTAAN

### PERAKUAN PERMOHONAN

Semua maklumat yang diisi adalah benar, pihak BPO berhak menolak permohonan atau membatalkan tawaran pada bila-bila masa sekiranya keterangan yang dikemukakan adalah tidak benar.

Nama: **HILMI BIN ABDUL RAHMAN**  
 Email: hilmi.abdulrahman@utm.my  
 Tandatangan & cop:  
 (Ketua Kumpulan)

Tarikh: 9/15/2024 11:24:47 AM



**BAHAGIAN PENGURUSAN ORGANISASI  
JABATAN PENDAFTAR**

Edisi: 0  
Pindaan: 0  
Tarikh kuat kuasa: 26.11.2023

**PENGESAHAN KETUA PUSAT TANGGUNGJAWAB (PTJ)**

(Diisi oleh pemilik utama projek)

Saya mengesahkan bahawa projek inovasi ini adalah **\*MILIK PENUH PTJ SAYA / ~~MILIK BERSAMA PTJ LAIN.~~**

Nama: **PROFESSOR. IR. TS. DR. SHEIKH AHMAD ZAKI BIN SHAIKH SALIM**

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Tandatangan & cop:

(Ketua PTJ)

Tarikh: