Prospective Learners' Needs and Preferences for Micro-Credential Programmes in Islamic Higher Education: A Survey at Uniqsaas

Mohammad Haafiz Aminuddin Mohd Azmi*., Ida Khairiyah Mohd Yusof., Muhammad Hanifah Haris., Nor Fadzilah Md Yusof

Centre for Lifelong Learning, Universiti Al-Quran Al-Sultan Abdullah Ahmad Shah Pahang (UNIQSAAS), KM8 Jalan Gambang, 25150 Kuantan, Pahang, MALAYSIA

***Corresponding Author**

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ABSTRACT

The growing demand for flexible and lifelong learning has increased interest in micro-credentials among higher education institutions. However, developing effective programmes requires an understanding of prospective learners' preferences for content, teaching methods, delivery, assessment, fees and recognition. This study examines the needs and preferences of prospective participants in micro-credential programmes at Universiti Al-Quran Al-Sultan Abdullah Ahmad Shah Pahang (UNIQSAAS). A quantitative, descriptive survey was conducted with 116 respondents. Frequencies and percentages were analysed across five dimensions: content, pedagogy, delivery, assessment and support, and access and recognition. Most respondents were students (81.9%), and 81.9% were aged 18–25. Languages and Education were the most popular fields, with English, Arabic, and Quranic memorisation and tajwid among the leading topics. Seventy-one respondents (61.2%) rated their prior knowledge of their chosen field as intermediate. Practical, application-based programmes were the most frequently selected programme type (37 of 116, 31.9%), followed by academic or research-oriented programmes (33 of 116, 28.4%). Face-to-face and hybrid delivery were favoured, while online quizzes and short assignments were the most popular assessment methods. Respondents particularly valued clear explanations and learning guidance from instructors. Of the 114 respondents who answered the fee question, most preferred fees of RM100 or less. In addition, 81.9% of the full sample expressed interest in digital certificates or badges. The findings suggest that micro-credential programmes in Islamic higher education should combine relevant content, practical teaching, flexible delivery, learning-aligned assessment, affordable fees and digital recognition. As the sample was dominated by young students, the findings primarily reflect their preferences rather than those of the wider population.

Keywords: micro-credentials; Islamic higher education; flexible learning; lifelong learning; learner preferences

INTRODUCTION

Changes in higher education have increased demand for learning that is flexible, focused and accessible throughout life. Micro-credentials offer a way to recognise specific knowledge or competencies through smaller units of learning than traditional academic qualifications. Previous studies link the growth of micro-credentials to lifelong learning, upskilling, graduate employability and more flexible learning pathways (Ahsan et al., 2023; McGreal & Olcott, 2022; Thi Ngoc Ha et al., 2023).

Micro-credentials are not simply shortened versions of conventional academic programmes. Their design raises questions about the value of learning, the outcomes to be recognised, assessment methods, stakeholder recognition, flexible delivery and access. In a systematic review involving several stakeholder groups, Varadarajan et al. (2023) found that learners generally expect short, practical and relevant courses, while institutions must address quality, recognition and the credibility of credentials.

An overly employment-focused approach has also attracted criticism. Wheelahan & Moodie (2022) warn that micro-credentials can narrow the purpose of education when learning is reduced to short-term job skills. Ralston (2021) similarly criticises the commercialisation of learning through the fragmentation of qualifications into smaller units. In contrast, Desmarchelier & Cary (2022) argue that micro-credentials can support lifelong learning when they are inclusive and centred on learners' interests.

These concerns are particularly relevant to Islamic higher education institutions. Their learning needs extend beyond professional development to include knowledge development, religious education, languages, the Quran, Shariah and lifelong learning. Micro-credential provision in these institutions must therefore reflect both institutional identity and the actual needs of prospective participants.

UNIQSAAS conducted a survey on proposed micro-credential programmes involving 116 respondents. The questionnaire collected information on respondents' backgrounds, preferred fields and topics, programme types, delivery methods, assessment, instructor support, fees and digital recognition. This study organises the responses into five dimensions to provide an empirical overview of micro-credential options that may meet the needs of UNIQSAAS's target learners.

For UNIQSAAS, an immediate planning question is which subjects to offer first and how to deliver them to prospective participants. Research on learners' experiences with existing micro-credentials informs delivery, but programme planning also requires evidence about the choices prospective learners would make before enrolment. This survey addresses that question by examining preferences for proposed offerings at an Islamic higher education institution in Pahang.

Although research on micro-credentials increasingly addresses learning flexibility, employability, pedagogy and digital recognition, empirical studies of prospective learners' needs in Islamic higher education remain limited. In particular, few studies examine content, pedagogy, delivery, assessment and support, and access and recognition together from the perspective of prospective participants. This study therefore aims to analyse the needs and preferences of prospective participants in micro-credential programmes at UNIQSAAS across these five dimensions.

LITERATURE REVIEW

Concepts and Development of Micro-Credentials

The literature shows that definitions, programme design and recognition mechanisms for micro-credentials are still evolving. Brown & Nic-Giolla-Mhichil (2022) identify different definitions and approaches that create tensions between educational goals, skills recognition and labour-market demands. Thi Ngoc Ha et al. (2023) similarly find growing interest in micro-credentials within higher education, alongside differences in their design, purposes and implementation across institutions.

In their systematic review of 56 articles, Ahsan et al. (2023) show that micro-credentials allow institutions to offer flexible learning in specific skills. At the same time, implementation raises challenges involving recognition, standardisation, design and stakeholder acceptance.

Micro-credentials should therefore be understood as part of a learning ecosystem linking learners, institutions, learning outcomes, assessment and recognition, rather than merely as short courses.

Learner Needs and Learning Flexibility

Flexibility is a defining feature of micro-credentials, but it does not necessarily mean fully online learning. Programme design should reflect participants' needs, learning goals and the context of delivery. Varadarajan et al. (2023) show that learners evaluate micro-credentials according to their relevance, practical value, cost and the usefulness of the skills gained.

In Malaysia, Kumar et al. (2022) show that micro-credentials can support digital learning and the development of learner identity when the learning environment is appropriately designed. Their study provides local empirical evidence on the use of micro-credentials in Malaysian higher education.

More recent research also highlights the need for institutional readiness in terms of structure, policy, technology and learning design before micro-credentials can be implemented systematically. Varadarajan et al. (2025), for example, identify institutional factors that support their effective integration into higher education.

Pedagogy and Learning Design

Micro-credentials should do more than shorten conventional lectures. Their teaching design should connect learning outcomes with activities, practical experience and assessment. Maina et al. (2022) show how micro-credential approaches can recognise employability skills through structured teaching and evidence of competence.

Reed et al. (2024) emphasise that effective micro-credentials do not emerge automatically. Deliberate learning design and instructor facilitation are essential. They also highlight the need for clear achievement criteria and assessment that aligns with delivery methods.

These findings support an integrated approach in which content, pedagogy, delivery and assessment work together as parts of a coherent learning experience.

Assessment and Digital Recognition

A key difference between an ordinary short course and a micro-credential is the need to demonstrate achievement of specified learning outcomes. Reed et al. (2024) distinguish between micro-credentials as credentials and as assessment mechanisms. If a credential confirms attendance alone rather than achievement, its academic value to stakeholders may be weaker.

Kiiskilä et al. (2023) show that verifiable digital credentials can benefit learners by allowing specific achievements to be recorded and shared transparently. Goulding et al. (2024) likewise show that digital badges can form part of assessment and the recognition of learning in university settings.

Access, Affordability and Equity

Although micro-credentials are associated with more flexible access, affordability remains important. Desmarchelier & Cary (2022) argue that equitable micro-credential provision should not limit learning opportunities to people who have sufficient financial or digital resources.

Affordability is especially relevant to this study because most respondents were young students. Programme fees are therefore not only a commercial consideration but also an issue of access to learning.

Overall, the literature suggests that effective micro-credentials depend not only on flexible delivery but also on the relationships between content, teaching design, assessment, learner support, access and recognition. Evidence is still needed on how prospective participants evaluate these elements within Islamic higher education. This gap provides the basis for the present study.

METHODOLOGY

Research Design

This study used a descriptive survey design to examine prospective participants' needs and preferences for micro-credential programmes at UNIQSAAS. Data were collected from 7 to 13 July 2026 using an online questionnaire administered through Microsoft Forms. A total of 116 respondents participated.

Respondents and Instrument

The research team developed the questionnaire using previous studies on micro-credentials to inform item development. Members of the team reviewed the items together before the questionnaire was distributed. No pilot study was conducted. The questionnaire covered respondents' backgrounds, topics of interest, reasons for their interest in those topics, and preferences for programme content, delivery, assessment, instructor support, fees and digital recognition.

Sampling

The study used non-probability convenience sampling. The research team shared the questionnaire link with higher education students and members of the public through online communication channels. Recipients decided whether to take part, and those who agreed completed the questionnaire voluntarily.

Analytical Dimensions

To organise the analysis, questionnaire items were conceptually grouped into five dimensions:

1. Content needs: fields, topics and motivations;
2. Pedagogical needs: prior knowledge, programme types and teaching approaches;
3. Delivery needs: learning modes, platforms, materials and duration;
4. Assessment and support needs: assessment methods and instructor support; and
5. Access and recognition needs: fees, payment methods and digital credentials.

These groupings served as an analytical framework rather than validated psychometric constructs. Reliability analysis, such as Cronbach's alpha, was therefore not applied to the five dimensions.

Data Analysis

Data were analysed using descriptive statistics, specifically frequencies and percentages. For items that allowed multiple responses, percentages were calculated using the number of respondents as the denominator; consequently, the total could exceed 100%.

Two respondents did not answer the fee question. This item was therefore analysed using 114 valid responses (98.3%), with two missing responses (1.7%). No imputation was performed because the analysis was descriptive. Fee-category percentages were calculated using n = 114.

RESULTS

Overall, respondents preferred micro-credentials that support knowledge development, offer relevant and practical content, use face-to-face or hybrid delivery, include short and flexible assessments, and remain affordable. They also showed strong interest in digital certificates or badges. The results are presented by respondent profile and the five analytical dimensions: content, pedagogy, delivery, assessment and support, and access and recognition.

Table 1. Demographic Profile of Respondents (N = 116)

Variable	Category	n	%
Gender	Male	41	35.3
	Female	75	64.7

Employment status	Student	95	81.9
	Private sector/self-employed	16	13.8
	Unemployed	3	2.6
	Public sector	2	1.7
Age	Under 18	4	3.4
	18–25	95	81.9
	26–35	5	4.3
	36–45	7	6.0
	46 and above	5	4.3
Education	SPM/STPM	14	12.1
	Diploma	60	51.7
	Bachelor's degree	34	29.3
	Postgraduate	8	6.9
Place of residence	Pahang	86	74.1
	Other Malaysian states	29	25.0
	Non-Malaysia	1	0.9

Most respondents were students aged 18–25. The results therefore reflect the preferences of young students more strongly than those of the adult population as a whole.

To identify content needs, the analysis examined preferred fields, specific topics and motivations for joining a micro-credential programme.

Table 2. Dimension 1: Content Needs

Component	Most selected options	n	%
Field*	Languages	60	51.7
	Education	48	41.4
	Islamic Studies	25	21.6
	Information Technology	24	20.7
	Management	21	18.1
	Shariah	20	17.2
Topic*	English	65	56.0

	Arabic	30	25.9
	Quranic memorisation and tajwid	30	25.9
	Entrepreneurship	27	23.3
	Inheritance	20	17.2
Motivation	Gaining knowledge	61	52.6
	Improving work skills	25	21.6
	Career development	16	13.8
	Academic purposes	13	11.2
	Promotion	1	0.9

* Multiple responses were permitted.

Languages was the most frequently selected field, followed by Education. English was the leading specific topic, while Arabic and Quranic memorisation and tajwid attracted equal levels of interest. Gaining knowledge was the main motivation, well ahead of career development and promotion.

These results show that respondents' content interests combined languages, education and Islamic studies, with a stronger emphasis on expanding knowledge.

The next analysis examined prior knowledge, programme types, delivery modes, platforms, materials and teaching approaches to understand preferences for the learning experience.

Table 3. Dimensions 2 and 3: Pedagogy and Learning Delivery

Component	Option	n	%
Prior knowledge	Basic	30	25.9
	Intermediate	71	61.2
	Advanced	15	12.9
Programme type	Practical/application-based	37	31.9
	Academic/research	33	28.4
	Basic introduction	23	19.8
	Advanced/professional	23	19.8
Delivery mode	Face-to-face	51	44.0
	Hybrid	44	37.9
	Online	20	17.2
	Self-paced	1	0.9

Preferred programme duration	One month	19	16.4
	Two months	16	13.8
	Three months	18	15.5
	Four months	12	10.3
	Five months	3	2.6
	Six months or longer	48	41.4
Platform	Microsoft Teams	61	52.6
	WhatsApp/Telegram	26	22.4
	Google Meet	18	15.5
Materials*	Notes	74	63.8
	Quizzes	53	45.7
	Videos	41	35.3
Teaching approach	Lectures	39	33.6
	Discussions	24	20.7
	Practical training	23	19.8

* Multiple responses were permitted.

Most respondents reported intermediate knowledge, and practical, application-based programmes were the most popular option. Face-to-face learning received the highest number of responses, with hybrid learning close behind. This pattern suggests a preference for delivery modes that retain direct interaction, either fully face-to-face or through hybrid learning. Assessment and support needs were examined to identify preferred assessment methods and the types of help respondents expected from instructors.

Six months or longer was the most frequently selected duration (48 of 116, 41.4%). The remaining 68 respondents (58.6%) selected durations of one to five months. These responses give UNIQSAAS a reason to test different programme lengths. The item measured preferred calendar duration and did not establish the number of learning hours respondents would undertake.

Table 4. Dimension 4: Assessment and Instructor Support

Component	Option	n	%
Assessment*	Online quizzes	60	51.7
	Short assignments	57	49.1
	Presentations	32	27.6
	Project submission	24	20.7

	Reflective assignments	19	16.4
	Portfolio	7	6.0
Instructor support	Clear explanations	42	36.2
	Learning guidance	34	29.3
	Flexible consultation	13	11.2
	Assignment feedback	12	10.3
	Motivation/encouragement	9	7.8
	Practical examples	6	5.2

* Multiple responses were permitted.

Online quizzes and short assignments were the most frequently selected assessment methods. Clear explanations and learning guidance were the main forms of instructor support requested. The final dimension examined access and recognition through preferred fees, payment methods and interest in digital certificates or badges.

Table 5. Dimension 5: Financial Access and Recognition

Component	Category	n	%
Fees*	Below RM50	58	50.9
	RM50–RM100	41	36.0
	RM101–RM200	10	8.8
	RM201–RM300	3	2.6
	Above RM300	2	1.8
Payment	One-off payment	46	39.7
	Free programme	29	25.0
	Instalments	21	18.1
	Sponsored programme	15	12.9
	Employer sponsorship	5	4.3
Digital certificate/badge	Yes	95	81.9
	Maybe	16	13.8
	No	5	4.3

* Fee responses are based on n = 114; two respondents did not answer.

Among the 114 valid responses to the fee question, 86.8% selected a fee of RM100 or less. Specifically, 58 respondents selected below RM50, and 41 selected RM50–RM100. In addition, 95 of the 116 respondents

expressed interest in a digital certificate or badge. These findings indicate that affordability and digital recognition are important considerations for potential participants.

Across all five dimensions, respondents preferred micro-credentials with relevant content, practical applications, interaction with instructors, flexible assessment, affordable fees and digital recognition.

DISCUSSION

Micro-Credential Needs Extend Beyond Career Goals

When asked why they were interested in their selected topic, 61 of 116 respondents (52.6%) chose gaining knowledge, followed by 25 (21.6%) who chose improving work skills. For UNIQSAAS, this finding supports offering topics that appeal to learners seeking to deepen their knowledge alongside those seeking to develop workplace skills. Varadarajan et al. (2023) show that learners value practical courses relevant to their professional lives, while Maina et al. (2022) highlight the role of micro-credentials in recognising employability skills. The present findings suggest that micro-credentials at UNIQSAAS need not focus exclusively on employment.

The strong preference for gaining knowledge may reflect the sample, which consisted mainly of students, and UNIQSAAS's identity as an institution centred on Quranic and Islamic studies. Respondents may therefore see micro-credentials as opportunities to expand their knowledge and pursue lifelong learning, as well as to develop professional competencies. However, this study did not use inferential analysis to test the relationship between demographic characteristics and motivation. This explanation should therefore be treated as a contextual interpretation, not as evidence of a causal relationship.

The findings broaden the discussion of micro-credentials in Islamic higher education. If programmes focus only on employment, they risk reducing education to instrumental goals, consistent with Wheelahan & Moodie (2022) criticism of short-term skills training for the gig economy. In the present context, micro-credentials could instead provide lifelong learning pathways that combine knowledge, skills and professional competencies. UNIQSAAS could therefore balance career-focused offerings with courses that support intellectual development in Arabic, Quranic studies, tajwid, Shariah and related fields.

Balancing Islamic Identity and Contemporary Skills

Languages and Education were the two most frequently selected fields, while respondents also showed interest in Arabic, Quranic memorisation and tajwid, and inheritance. These choices indicate that learners' needs extend beyond Islamic studies to languages, education and contemporary skills. Prospective participants may view micro-credentials as a way to combine Islamic knowledge with broader skills and learning. However, the survey did not directly examine why respondents chose these fields. This interpretation is based on response patterns and the institutional context.

For UNIQSAAS, these findings suggest scope to offer a multidisciplinary portfolio while retaining its identity as a university grounded in Quranic and Islamic studies. Interest in Languages, Education, Islamic Studies, Information Technology, Management, Shariah, and Quranic and Hadith studies points to opportunities for combining Islamic disciplines with current skills needs. The range of preferences challenges the assumption that micro-credentials at Islamic higher education institutions must be limited to religious courses.

Based on these patterns, programmes could be organised into clusters such as Quranic and Islamic Studies, Languages and Communication, Education and Pedagogy, and Professional Skills. These clusters are an interpretation of the needs data, not a programme structure tested empirically. Implementation would still need to consider academic expertise, institutional resources, actual demand and appropriate learning outcomes. This approach is consistent with research that describes micro-credentials as focused and flexible learning units for developing specific knowledge and skills (Ahsan et al., 2023; Varadarajan et al., 2023).

Flexibility Should Reflect Learner Needs

Respondents selected face-to-face and hybrid learning more often than fully online delivery. This suggests that flexibility at UNIQSAAS does not necessarily mean moving all learning online. The preference may reflect the student-dominated sample and the interactive nature of topics such as Arabic, Quranic memorisation and tajwid, which often require demonstration, correction and direct feedback. However, the study did not measure why individuals selected particular learning modes, so this remains a contextual interpretation.

Kumar et al. (2022) show that digital micro-credential learning can offer positive experiences when teaching design and support are appropriate. The UNIQSAAS survey suggests that technology does not necessarily replace face-to-face interaction. Instead, it can complement teaching, especially through hybrid learning that combines digital flexibility with direct interaction. Programme design should therefore consider content, the level of competence being developed and learners' need for interaction, rather than convenience alone.

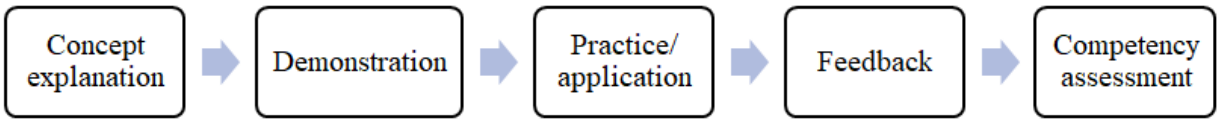
Hybrid delivery may be suitable for courses that involve skills such as tajwid, Quranic memorisation or Arabic. Some content could be delivered online, while activities requiring demonstration, correction and feedback could take place face-to-face. Flexibility at UNIQSAAS is therefore better understood as selecting delivery modes that suit the content and intended competencies, rather than digitising every part of the learning process.

Practical Programmes Still Need Instructor Support

Respondents preferred practical, application-based programmes, yet lectures remained the most frequently selected teaching approach. These preferences may appear inconsistent, but together they suggest that learners want clear instruction as well as opportunities to apply what they learn.

Reed et al. (2024) emphasise that successful micro-credentials require deliberate learning design and instructor facilitation. This is consistent with the survey results, in which clear explanations and learning guidance were the two leading forms of support. A possible structure for a micro-credential session is shown below:

Figure 1. Proposed Design of a Micro-Credential Session



Short Assessments Do Not Mean Easy Assessments

Quizzes and short assignments were the most popular choices. However, participant preferences should not lead to assessments that measure only recall or attendance.

Reed et al. (2024) argue that meaningful credentials should verify achievement of learning outcomes against criteria that learners and stakeholders can understand.

Quizzes may be appropriate for knowledge-based micro-credentials, but skills-based programmes require more authentic assessment. Assessment methods could therefore be matched to the competencies being developed, as illustrated below.

Table 6. Suggested Assessment Methods by Competency

No.	Course	Assessment method
1.	Tajwid	recitation demonstration
2.	Arabic	communication task

3.	Entrepreneurship	mini-project
4.	Pedagogy	teaching demonstration
5.	Islamic inheritance law (*faraid*)	case-based problem solving

Affordability as a Dimension of Access

Of the 114 respondents who answered the fee question, 99 (86.8%) selected RM100 or less for one programme. UNIQSAAS could use this range as a starting point for a pricing pilot and compare stated preferences with actual enrolment at the advertised fee. The survey did not measure respondents' income or the fee they ultimately paid.

Pricing could therefore vary according to programme level, duration and target participants rather than follow a single standard fee. UNIQSAAS could consider:

1. low entry-level fees;
2. different fees according to programme level;
3. bundled micro-credential packages;
4. sponsorship;
5. student subsidies; and
6. community learning programmes.

Digital Recognition as Added Value

Interest in digital certificates or badges among approximately 82% of respondents suggests that learners value these forms of recognition as potential evidence of achievement for academic or professional purposes.

Kiiskilä et al. (2023) show that digital credentials can be valuable when their underlying achievements can be verified. Goulding et al. (2024) also discuss how digital badges are used in higher education and assessment.

However, a digital certificate should not be issued solely for attendance. Its value is stronger when it records:

1. learning outcomes;
2. level of achievement;
3. assessment methods;
4. awarding institution;
5. total learning hours; and
6. evidence of competence.

Overall, the findings suggest that micro-credential development at UNIQSAAS should consider learners' needs in relation to content, pedagogy, delivery, assessment, access and recognition. Interpretation requires caution: 81.9% of respondents were students, and the same proportion were aged 18–25. The findings therefore mainly describe young students' preferences and cannot be directly generalised to workers, professionals or the wider public.

Study Limitations

This study has several limitations. First, non-probability convenience sampling may have introduced selection bias, because participation depended on access to the online questionnaire and willingness to respond. The sample was also concentrated among young students: 81.9% were students, 81.9% were aged 18–25, and 74.1% lived in Pahang. The results therefore reflect this particular group and local context more than the preferences of workers, professionals or the wider public. They cannot be statistically generalised to these populations.

Second, the descriptive analysis identified response patterns but did not test relationships between demographic characteristics, motivation, affordability and programme preferences. The five dimensions were created by conceptually grouping questionnaire items; they were not validated psychometric constructs. They should therefore be interpreted as descriptive categories rather than established scales.

Third, only 114 respondents provided valid answers to the fee question. Their selected fee ranges indicate stated preferences, not necessarily how much they would actually pay when a programme is offered. Future studies should recruit more diverse participants and use designs that can test relationships between variables.

CONCLUSION

This study identified five main areas of need and preference for micro-credentials at UNIQSAAS: content, pedagogy, delivery, assessment and support, and access and recognition. Respondents generally preferred programmes that expand knowledge, offer practical learning, use face-to-face or hybrid delivery, provide flexible assessment, remain affordable and include digital recognition.

The study's main contribution is an initial empirical account of these five dimensions as a basis for designing learner-centred micro-credentials in Islamic higher education. The findings also suggest opportunities to combine Islamic knowledge with languages, education and contemporary professional skills, rather than focusing exclusively on employment-related training.

These findings should be interpreted within the limits of a student-dominated sample and descriptive analysis. Future research should include a broader range of workers, professionals and members of the public, employ inferential analysis, and develop and validate instruments specifically designed to examine relationships between demographic characteristics, motivation, affordability and micro-credential preferences.

Ethical Approval

This study involved the collection of data through an online questionnaire. Participation was voluntary, and the data were used solely for research purposes. The study was conducted with due consideration for the ethical principles of voluntary participation, informed consent, confidentiality, and responsible data management.

Conflict Of Interest

The authors declare that they have no conflicts of interest related to the conduct, analysis, or publication of this study.

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