

Review Form 3

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_123574
Title of the Manuscript:	Implementation of Shamir Adleman's Rivest Algorithm in Securing User Login OTP in the Film Bank Application
Type of the Article	Research

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

Important Policies Regarding Peer Review

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

[Review Form 3](#)

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>This manuscript is important for the scientific community as it explores a practical solution to enhancing security in OTP-based login systems, a common authentication method used globally. The use of the RSA algorithm to encrypt OTP codes, transforming them into QR codes,. I appreciate how the study rigorously tests the system using the avalanche effect method, providing evidence of the algorithm's effectiveness in securing sensitive data. The manuscript could have been improved by including more real-world performance metrics or a broader analysis of similar cryptographic methods. Overall, the study offers valuable insights into securing digital authentication systems and contributes to the field of cryptography and data protection.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Securing OTP-Based Access in Film-Sharing Platforms Using RSA Encryption and QR Codes</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>This study addresses the vulnerabilities of OTP-based login systems in video streaming services by implementing RSA encryption and QR code technology for secure OTP delivery. By encrypting the OTP code and converting it into a QR code, the system ensures secure transmission via email. The encrypted OTP is tested using the avalanche effect, demonstrating a 51.9% improvement in security. This method significantly reduces the risk of interception, ensuring that only authorized users can access protected content.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Organize the Introduction with a clear problem statement and solution outline. <input type="checkbox"/> Add a Literature Review section to contextualize related work. <input type="checkbox"/> Divide the Methodology into distinct subsections for clarity. <input type="checkbox"/> Include more structured discussions in the Results section, focusing on security and performance metrics. <input type="checkbox"/> Add a Conclusion to summarize findings. 	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript demonstrates scientific robustness and technical soundness by incorporating well-established cryptographic principles, specifically the RSA algorithm, to secure One-Time Passwords (OTP) system designed for user authentication in a film streaming platform. The RSA encryption, paired with the avalanche effect testing, provides a quantitative measure of security effectiveness, with the 51.9% result indicating strong resilience against unauthorized access. Furthermore, the systematic approach, including prototyping for system development and the use of both functional and non-functional requirements, enhances the reliability of the proposed system. The combination of theoretical foundations and practical implementation contributes to the scientific credibility of the work.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>⋮</p>	<p>The references included in the research seem appropriate and provide a foundation for discussing cryptography, OTP security vulnerabilities, and the general framework of streaming and login security systems. However, several of the references cited in this work appear somewhat limited in scope, focusing mainly on broad topics like the rapid growth of internet-connected devices and online platforms.</p> <p>Suggestions for additional references:</p> <ol style="list-style-type: none"> 1. More recent cryptographic security studies – Since cryptography is a fast-evolving field, consider including references from studies published in the past three years that address OTP encryption specifically. Some notable papers could cover: <ul style="list-style-type: none"> ○ RSA alternatives or improvements, like ECC (Elliptic Curve Cryptography). ○ Studies on encryption vulnerabilities in modern contexts, including advances in hacking techniques and mitigation strategies. 2. Specific case studies on OTP vulnerabilities – The research would benefit from newer examples of security breaches involving OTPs, especially regarding recent attacks on large-scale platforms using SMS OTPs (such as attacks on Google, Microsoft, etc.). 3. Applications of RSA in modern security systems – RSA has been in use for several 	

Review Form 3

	<p>decades, and modern research often focuses on practical implementations and variations of RSA in systems. Including recent case studies or reviews that highlight RSA's use in security, particularly within video streaming or data-sharing contexts, would enhance the depth of the discussion.</p> <p>4. Avalanche effect studies – Incorporating studies that explore the application of the avalanche effect specifically to cryptographic systems like RSA, including more detailed explanations and comparative studies with other encryption algorithms, would strengthen your methodology section.</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p><input type="checkbox"/> Grammar and Sentence Structure:</p> <ul style="list-style-type: none"> Some sentences are long and complex, making them harder to follow. Breaking these sentences into shorter, more precise sentences can improve readability. For example: "To grant access rights to the account you wish to provide, an intermediary is needed so that the system can ensure that the data is correctly provided by the sender to the right person." can be rephrased as: "To grant access rights to an account, the system requires an intermediary to ensure the data is accurately provided to the correct recipient." <p><input type="checkbox"/> Technical Vocabulary:</p> <ul style="list-style-type: none"> While the technical terms are mostly correct, some expressions can be more precise. For instance, "susceptible to attacks" could be replaced with "vulnerable to attacks," which is more commonly used in scholarly writing. <p><input type="checkbox"/> Coherence and Flow:</p> <ul style="list-style-type: none"> The transitions between sections could be smoother. At times, the article jumps from one idea to another without clear linkage. Example: "The OTP code in this study is used to grant users access..." could flow better with a preceding statement about the role of OTP codes in modern security systems. <p><input type="checkbox"/> Punctuation:</p> <ul style="list-style-type: none"> There are some issues with punctuation, especially in complex sentences where commas could help improve readability. Example: "However, from the results of research on OTPs provided via SMS, several types of attacks were found..." requires proper commas to avoid confusion. <p><input type="checkbox"/> Scholarly Tone:</p> <ul style="list-style-type: none"> In some places, the tone could be more formal and objective. Words like "really" in "This certainly really helps people..." could be replaced with more formal language like "This significantly helps users..." 	
<p><u>Optional/General</u> comments</p>		

Review Form 3

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Bhavesh Kataria
Department, University & Country	Sarva Vishwavidyalaya, India