

No.	Student Name	Student ID	Assigned Tasks (Coding & Implementation)	Report Sections	Completion
1	Lê Sĩ Nhật Khuê <i>(Group Leader)</i>	24110102	<p>System Architect & Main Logic:</p> <ul style="list-style-type: none"> Designed TrieNode structure with dynamic child mapping. Implemented Trie::insert and Trie::searchPrefix logic. Developed the DFS algorithm for auto-complete traversal. Built the Console UI (main.cpp) and input normalization. 	<ul style="list-style-type: none"> Part 1: Introduction & Scope. Part 2: Theory (Trie). Part 3: System Design (3.1, 3.2, 3.3). Part 3.5: Time/Space Complexity Analysis. Part 4: System Testing & Screenshots 	100%

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2	<p>Nguyễn Quốc Bảo Khang</p> <p>(Member)</p>	24110099	<p>Security & Hashing Module:</p> <ul style="list-style-type: none"> Implemented UniversalHash class (Randomized coefficients generation). Developed HashTable with Separate Chaining for collision resolution. Integrated Universal Hashing into Trie Nodes. Conducted security testing (Fail-fast verification). 	<ul style="list-style-type: none"> Part 2: Theory (Hash Tables, DoS Attacks). Part 3.4: Secure Hash-based Child Mapping. Part 3.5: Time/Space Complexity Analysis. Part 5: Conclusion & Future Work. Diagrams: Created system architecture diagrams. 	100%

