

No.	Student Name	Student ID	Assigned Tasks (Coding & Implementation)	Report Sections	Completion
1	Lê Sĩ Nhật Khuê <i>(Group Leader)</i>	24110102	System Architect & Main Logic: <ul style="list-style-type: none"> • Designed <code>TrieNode</code> structure with dynamic child mapping. • Implemented <code>Trie::insert</code> and <code>Trie::searchPrefix</code> logic. • Developed the DFS algorithm for auto-complete traversal. • Built the Console UI (<code>main.cpp</code>) 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%

