Task: 1

NLA:

NLA which is also called Natural Language Analysis is the process of identification of verbs, nouns as well as adjectives and then convert it to classes, attributes and methods.

NLA is done by following methodologies,

* Candidates listing
* Duplication removal
* Removing Irrelevancy
* Candidate which are not in the project scope.
* Noun

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| --- | --- | --- | --- | --- | --- | --- |
|  | List Of candidate Class | |  | |  | |
| * Sudoku * Number * Placement * Puzzles * Series * Grids * Numbers * Number * Column * Row * Sudoku * Cells * Player * Job * Rest * Sudoku * Puzzle * Task * Assessment * Sudoku * Puzzle * Generator * Puzzles * Difficulty * Categories * Easy | * Sudoku * Puzzle * Validity * Player * Puzzle * Game * Modes * Unassisted * Way * Solution * Puzzle * Assessment * Time * Game * Numbers * Grid * Player * Account * Sudoku * Puzzle * Account * Progress * Player * Progress * Return * Puzzles | | * Puzzle * difficulty * level * time * difficulty * category * number * mistakes * puzzles * Job * Software * Sudoku * Puzzles * Difficulty * Levels * Number * Elements * Sudoku * UI * Sudoku * Puzzle * Users * System * Stores * Progress * Sudoku | | * Support * Checking * Solutions * Calculate * Statistics * Player * Performance * Support * checking * Solution * Application * Set * Stats * Player * Percentage * Puzzles * Percentage * Puzzle * Start * Medium * Sudoku * Puzzle * Start * Player * Request * Sudoku | |
| Removing Duplicate candidate classes | | | | | | |
| * Sudoku * Player * Number * Puzzle * Difficulty * Category * Progress * Grid * Job * Game * Account | | * Level * Support * Checking * Solutions * Placement * Series * Column * Row * Cells * Rest * Task * Assessment | | * Generator * Easy * Validity * Mode * Unassisted * Way * Time * Return * Mistakes * Software * Elements * UI * Users | | * System * Stores * Calculate * Statics * Performance * Application * Stats * Percentage * Medium * Starts |

|  |  |  |  |
| --- | --- | --- | --- |
| Removing Irrelevant classes | | | |
| * Sudoku * Player * Number * Puzzle * Difficulty * Category * Progress * Grid * Game * Account | * Level * Checking * Solutions * Placement * Series * Column * Row * Cells * Assessment | * Generator * Validity * Time * Return * Mistakes * Software * Users | * System * Stores * Calculate * Performance * Application * Starts |

* Removing synonyms
* Sudoku> game> puzzle= Puzzle
* Player > User =Player
* Category >level = Level
* Grid > cells > series > rows > column =cells
* Assessment > solutions >checking > account> calculate = calculate
* Software > system= system
* Removing complex word
* Mistakes
* Validity
* Generator
* Return
* Mistakes
* Starts
* Stores
* Placement

|  |  |  |
| --- | --- | --- |
| Noun identification for candidate class | Selected as candidate class | Justification for selection or rejection as candidate class |
| player | yes |  |
| User | no | It is similar to player |
| Job | no | Irrelevant to the requirements |
| Puzzle | yes | Requirements secifies |
| Sudoku, game | no | Similar to puzzle |
| Cells | yes | Grid,column, rows all lie in cells and it meets requirements |
| Calculate | yes | Requiremnts specifies |
| Percentage | no | Irrelevant to the requirements |
| System | yes | Requiremnts specifies |
| Level | yes | Categories the medium of the system. |

|  |
| --- |
| Selected candidate class |
| * Player * Puzzle * Level * Cells * System * Calculate |

* Verb

|  |  |  |  |
| --- | --- | --- | --- |
|  | List Of candidate Class |  |  |
| * Defined * Placed * Used * Start * Filled * Work * Fill * Starting * May * Look * Write * Create * Filled * Filled * Create * Should * Ensure * Generated * Presented * Fill | * Supported * Completed * Submit * Aided * Check * Find * Should * Permitted * Create * Generated * Linked * Save * Attempted * Include * Completed * Completed * Complete | * Creates * Permits * Allows * Generated * Generates * Validates * Solved * Provides * Completing * Generated * Permits * Added * Removed * Generated * Regarding * Entered * Aided * entered |  |

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| --- | --- | --- |
|  | Removing Duplicate candidate functionality. |  |
| * Defend | * Supported | * Creates |
| * Placed | * Completed | * Permits |
| * Used | * Submit | * Allows |
| * Start | * Aided | * generate |
| * Filled | * Check | * Work |
| * Find | * Validates | * Should |
| * Provides | * May | * Look |
| * Write | * Linked | * Save |
| * Attempted | * Removed | * Include |
| * Regarding | * Entered | * Ensure |
| * presented |  |  |

|  |  |  |
| --- | --- | --- |
|  | Removing irreverent functionality |  |
| * Created | * Placed | * Completed |
| * Permits | * Used | * Submit |
| * Allows | * Start | * Generate |
| * Filled | * Check | * Find |
| * Validates | * Provides | * Linked |
| * Save | * Attempted | * Removed |
| * Include | * Entered | * ensure |