

System Component Table

Component	Responsibilities	Interacts with	Error Handling	Security Consideration
User Task Data	Store details about the user's tasks, including new tasks and imported competencies	Database, Task List Display	Handle corrupted data, ensure data integrity	Future: Encrypt user data, protect against unauthorized access
Local Data	Store user's history (previous task created, etc.), input files	App Executable	Validate file formats, handle read/write errors	Future: Ensure input files are encrypted and securely stored
App Executable	Control the whole functionality and provide interfaces for other components	Local Data, DateTime, Graphic Manager	Handle application crashes gracefully	Future: Implement user authentication, protect against unauthorized access
Task list display	Show a list of tasks/competencies	User Task Data	Handle display errors, ensure accurate data rendering	Future: Limit access to authorized users, protect task data
Graphics Manager	Manage all graphic visualization	User Task Data, App Executable	Handle graphic rendering errors, optimize for performance	Future: Ensure graphic data is securely handled
Task Management	Manage task (creating, deleting, modifying tasks)	Local Data, DateTime, Data management	Notify users of invalid dates, log database errors	Future: Encrypt task data, validate input
Data Display	Display task information	Graphic manager	Handle display errors, ensure data accuracy	Future: Limit access to authorized users, protect task data
DateTime	Retrieve date and time information for task modification and creation	App Executable	Handle data/time retrieval errors	Future: Ensure date/time data is securely handled
Data Management	Modify task data and store it in another format	Task Management, Local Data	Handle data format errors, log modification	Future: Encrypt modified data, ensure data integrity
Task Management Function	Manage task-related functions (Get date, Clear tasks)	App Executable, User Task Data	Handle function errors, ensure correct function output	Future: Validate input data, ensure secure handling