progress data obtained by integrating the inspection schedules and records are provided. In the progress management, a progress confirmation system that transmits construction progress data obtained by converting an inspection progress status into a physical quantity of construction progress to the construction plan support system is combined, and section-classified processes and the previous construction progress data are integrated, to display a process chart with a chart progress line indicating the construction progress (e.g., Patent Literature 3).

CITATION LIST

PATENT LITERATURE

[0006] Patent Literature 1: JP 2004-227307 A

Patent Literature 2: JP 2013-45308 A

Patent Literature 3: JP 2010-282496 A

SUMMARY

[0006a] In an aspect, the present disclosure refers to a form management method using a computer, wherein the computer executes:

generating a task information table for storing two or more pieces of task information for each management function, and storing the task information in the task information table;

generating two or more task management tables each specified by the management function;

generating an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

selecting any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and storing the task information, which is executed for each management function, selected by the selection information in the task management table(s); and

selecting, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflecting input information, and

wherein the computer performs creation processing of forms.

[0006b] In an aspect, the present disclosure refers to a form management system used for a creation of forms, the form management system comprising:

a memory unit configured to store a task information table for storing two or more pieces of task information for each management function, two or more task management tables each specified by the management function, and an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

a processing unit configured to generate the task information table, the task management tables, and the execution task selection table, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the task management tables to store the task information, which is executed for each management function, specified by the selection information; and

an information terminal including an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and information after transition on the task management tables, wherein

the processing unit selects, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflects input information.

[0006c] In an aspect, the present disclosure refers to a program for causing a computer to execute:

a function to generate a task information table for storing two or more pieces of task information for each management function, and store the task information in the task information table;

a function to generate two or more task management tables each specified by the management function;

a function to generate an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

a function to select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and store the task information, which is executed for each management function, specified by the selection information in the task management tables; and

a function to select, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the

specific task management table, the other task management tables being set for each task management table for information sharing, and reflect input information.

[0006d] In an aspect, the present disclosure refers to a form management device used for a creation of forms, the form management device comprising:

a memory unit configured to store a task information table for storing two or more pieces of task information for each management function, two or more task management tables each specified by the management function, and an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

a processing unit configured to generate the task information table, the task management tables, and the execution task selection table, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the task management tables to store the task information, which is executed for each management function, specified by the selection information; and

an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and information after transition on the task management tables,

the memory unit, the processing unit, and the information presentation unit being installed in a housing, wherein

the processing unit selects, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflects input information.

[0007] In the regular repair work and the like of the heat exchange system included in the oil refining plant, an orderer is the owner company that operates the plant, and an order receiver is the partner company that undertakes construction processing and management thereof. The heat exchange system as a target of the regular repair work includes a plurality of heat exchangers having different specifications and the like, and a large number of related machinery. Since the regular repair work is performed by stopping the heat exchange system, a construction period for minimizing the stop period is required. In addition, elements such as system specifications and regular repair cost are also added as matters to be considered.

[0008] For the orderer of the regular repair work, management of progress, inspection according to the progress, and the like are main processing matters. On the other hand, the order receiver is required to grasp the concept of the orderer and the entire image of the system as the regular repair target, establish a regular repair plan, execute the construction processing,

and receive the inspection of the orderer as required, to complete the regular repair work.

[0009] The processing of the orderer and the order receiver in such regular repair work has been previously executed on the basis of preparation of documents. There is a problem in that it is necessary to prepare documents according to the scale of the system and the amount of machinery included therein, and a workload of manually preparing a large number of documents is enormous.

[0010] The regular repair work includes a plurality of processes such as construction progress, reporting, inspection permission, and confirmation. For example, when the regular repair work of one piece of machinery is completed, the inspection permission is given from the orderer who

has received a report on the completion. If the inspection result does not reach an acceptance range, for example, does not meet a standard, the process cannot proceed to a next process. This management is excellent from the viewpoint of safety, but there is also a problem in that the construction progress is entrusted to an inspector of the orderer. Information sharing between the orderer and the order receiver is essential. Insufficient information sharing causes a problem in that a temporal loss between the processes is induced in terms of basic points such as search for a position of inspection machinery.

[0011] Since sheets generated by spreadsheet software are usually used for information input, it has been difficult to link the sheets together. That is, suppose that information is input to one sheet, and another necessary sheet is then retrieved. In this case, for example, if processes and construction quality management information are described in different sheets, it is troublesome to retrieve these sheets and search for related information between the processes. In order to create and link the sheets together, it is necessary to manually perform a large number of processes, resulting in a problem in that this work could cause human errors, and a worker has an enormous workload.

[0012] There is another problem in that construction work is delayed if a constructor or a manager takes time to confirm construction progress in addition to status information such as construction progress.

[0013] With regard to such problems, the configurations disclosed in Patent Literature 1 to Patent Literature 3 cannot solve the problems presented in the present disclosure.

[0014] The inventors of the technology of the present disclosure have found that, regarding form management necessary for regular repair work of a heat exchange system and the like, the load of all management such as progress management in the regular repair work can be reduced by database creation of information necessary for the regular repair work, automatic creation of sheet information, and information sharing, thereby achieving improvement in reliability as well as time reduction of the regular repair.

[0015] Therefore, in view of the above problems and findings, the technology of the present disclosure is to make it easy for an orderer, an order receiver, and a person in charge of construction work to grasp information by creating a database of information necessary for regular repair work, dividing an information table by each management function, and spreading input information.

[0016] In order to achieve the above, according to one example of a form management method of the present disclosure, a form management method is a form management method using a computer and including: generating a task information table for storing two or more pieces of task information, and storing the task information in the task information table;

generating two or more task management tables each specified by a management function; generating an execution task selection table to which selection information for selecting task information to be executed from the task information is input; and selecting any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and storing the task information specified by the selection information.

[0017] The form management method may further include presenting any one, or two or more of the task information table, the task management tables, the execution task selection table, and transition information on the task management tables, on an information terminal.

[0018] The form management method may further include, based on information input to the specific task management table, selecting any one, or two or more of the other task management tables, and reflecting input information.

[0019] The form management method may further include acquiring input information from any one, or two or more of the plurality of task management tables, and presenting all of the input information on the specific task management table.

[0020] In order to achieve the above, according to one example of a form management system of the present disclosure, a form management system includes: a memory unit configured to store information; a processing unit configured to generate a task information table for storing two or more pieces of task information, two or more task management tables each specified by a management function, and an execution task selection table to which selection information for selecting task information to be executed from the task information is input, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the memory unit to store the task information specified by the selection information; and an information terminal including an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and transition information on the task management tables.

[0021] In order to achieve the above, according to one example of a program of the present disclosure, a program is for causing a computer to execute: a function to generate a task information table for storing two or more pieces of task information, and store the task information in the task information table; a function to generate two or more task management tables each specified by a management function; a function to generate an execution task selection table to which selection information for selecting task information to be executed from the task information is input; and a function to select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection

table, and store the task information specified by the selection information.

[0022] The program may further cause the computer to execute a function to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and transition information on the task management tables, on an information terminal.

[0023] The program may further cause the computer to execute, based on information input to the specific task management table, a function to select any one, or two or more of the other task management tables, and reflect input information.

[0024] The program may further cause the computer to execute a function to acquire input information from any one, or two or more of the plurality of task management tables, and present all of the input information on the specific task management table.

[0025] In order to achieve the above, according to one example of a form management device of the present disclosure, a form management device includes: a memory unit configured to store information; a processing unit configured to generate a task information table for storing two or more pieces of task information, two or more task management tables each specified by a management function, and an execution task selection table to which selection information for selecting task information to be executed from the task information is input, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the memory unit to store the task information specified by the selection information; and an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and transition information on the task management tables, the memory unit, the processing unit, and the information presentation unit being installed in a housing.

[0026] In order to achieve the above, according to one example of a database of the present disclosure, a database is used for form management and includes: a task information table for storing two or more pieces of task information; two or more task management tables each specified by a management function; and an execution task selection table to which selection information for selecting task information to be executed from the task information is input, wherein the task information specified by the selection information is stored in any one, or two or more of the task management tables selected based on the selection information.

[0027] In order to achieve the above object, according to one example of a recording medium of the present disclosure, a recording medium stores any one, or two or more of the task information table and the task management tables included in the form management method, the task information table and the task management tables included in the form management system, and the program.

What is claimed is:

1. A form management method using a computer, wherein the computer executes:

generating a task information table for storing two or more pieces of task information for each management function, and storing the task information in the task information table;

generating two or more task management tables each specified by the management function;

generating an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

selecting any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and storing the task information, which is executed for each management function, selected by the selection information in the task management table(s); and

selecting, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflecting input information, and

wherein the computer performs creation processing of forms.

2. The form management method according to claim 1, wherein the computer further executes presenting any one, or two or more of the task information table, the task management tables, the execution task selection table, and information after transition on the task management tables, on an information terminal.

3. The form management method according to claim 1 or 2, wherein the computer further executes acquiring input information from any one, or two or more of the plurality of task management tables, and reflecting all of the input information on the specific task management table.

4. A form management system used for a creation of forms, the form management system comprising:

a memory unit configured to store a task information table for storing two or more pieces of task information for each management function, two or more task management tables each specified by the management function, and an execution task selection table to which

selection information for selecting task information to be executed from the task information for each management function is input;

a processing unit configured to generate the task information table, the task management tables, and the execution task selection table, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the task management tables to store the task information, which is executed for each management function, specified by the selection information; and

an information terminal including an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and information after transition on the task management tables, wherein

the processing unit selects, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflects input information.

5. A program for causing a computer to execute:

a function to generate a task information table for storing two or more pieces of task information for each management function, and store the task information in the task information table;

a function to generate two or more task management tables each specified by the management function;

a function to generate an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

a function to select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and store the task information, which is executed for each management function, specified by the selection information in the task management tables; and

a function to select, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflect input information.

6. The program according to claim 5, for further causing the computer to execute a function to present any one, or two or more of the task information table, the task management

tables, the execution task selection table, and information after transition on the task management tables, on an information terminal.

7. The program according to claim 5 or 6, for further causing the computer to execute a function to acquire input information from any one, or two or more of the plurality of task management tables, and reflect all of the input information on the specific task management table.

8. A form management device used for a creation of forms, the form management device comprising:

a memory unit configured to store a task information table for storing two or more pieces of task information for each management function, two or more task management tables each specified by the management function, and an execution task selection table to which selection information for selecting task information to be executed from the task information for each management function is input;

a processing unit configured to generate the task information table, the task management tables, and the execution task selection table, select any one, or two or more of the task management tables based on the selection information acquired from the execution task selection table, and cause the task management tables to store the task information, which is executed for each management function, specified by the selection information; and

an information presentation unit configured to present any one, or two or more of the task information table, the task management tables, the execution task selection table, and information after transition on the task management tables,

the memory unit, the processing unit, and the information presentation unit being installed in a housing, wherein

the processing unit selects, based on information input to the specific task management table, any one, or two or more of the other task management tables set for information sharing with the specific task management table, the other task management tables being set for each task management table for information sharing, and reflects input information.