Draft
Revised EXAMINATION GUIDELINES

FOR
COMPUTER SOFTWARE RELATED INVENTION

ATTENTION

This is a provisional translation of Japanese text of " Draft revised EXAMINATION GUIDELINES FOR COMPUTER SOFTWARE INVENTION". When any ambiguity of interpretation is found in this translation, the Japanese text shall prevail.

JAPANESE PATENT OFFICE
EXAMINATION STANDARDS OFFICE

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VIII. EXAMINATION GUIDELINES FOR INVENTIONS IN SPECIFIC FIELDS

Example 2-3. Apparatus for predicting daily sales of commodities

(Example where predicting processing by software of daily sales of commodities is concretely realized using the hardware resources)

[Title of Invention]

Apparatus for predicting daily sales of commodities

[Scope of Claim]

[Claim 1]

A computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

a means for inputting the date of which daily sales is predicted;

a sales data storage means prepared for storing data representing actual daily sales records;

a variable condition rule storage means prepared for storing data representing variable condition;

a correction rule storage means prepared for storing correction data;

a means for getting the first predicted value by reading data representing daily sales records in the past few weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

a means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date of which daily sales of the commodities is predicted, and selecting correction rules to be applied to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

a means for determining the second predicted value by correcting the first predicting value based on said correction rule to be applied; and

a means for outputting the second predicted value.

[Claim 2]

A computer-readable storage medium containing thereon a computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

a means for inputting the date of which daily sales is predicted;

a sales data storage means prepared for storing data representing actual daily sales records;

a variable condition rule storage means prepared for storing data representing variable condition;

a correction rule storage means prepared for storing correction data;

a means for getting the first predicted value by reading data representing daily sales records in the past few weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

a means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date of which daily sales of the commodities is predicted, and selecting correction rules to be applied to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

a means for determining the second predicted value by correcting the first predicting value based on said correction rule to be applied; and

a means for outputting the second predicted value.

[Claim 3]

An apparatus for predicting daily sales of various commodities comprising:

a means for inputting the date of which daily sales is predicted;

a sales data storage means prepared for storing data representing actual daily sales records;

a variable condition rule storage means prepared for storing data representing variable condition;

a correction rule storage means prepared for storing correction data;

a means for getting the first predicted value by reading data representing daily sales records in the past few weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

a means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date of which daily sales of the commodities is predicted, and selecting correction rules to be applied to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

a means for determining the second predicted value by correcting the first predicting value based on said correction rule to be applied; and

a means for outputting the second predicted value.

[Description of the Invention]

[Technical field to which the invention pertains]

This invention relates to a computer system for predicting daily sales necessary for ordering commodities at a retail shop, and more particularly, to a computer system for predicting daily sales suitable for predicting daily sales of various commodities at a large scale retail shop such as a supermarket whose demand changes largely.

[Prior art]

Daily sales of commodities at a large scale retail shop such as a supermarket changes largely, depending on various factors, e.g., the day of the week, the date, weather, selling status of competing shops (a bargain day, shop closing, etc.), and events held in the local community. Therefore, amounts of commodities to be ordered are determined depending on daily sails prediction based on inventory control caretaker's experience.

Thus, carrying out a prediction took too much time especially in the case inventory caretaker had little experience.

Moreover, overlooking of some factors of change often arose and prediction was not so accurate.

[Problems to be solved by the invention]

The problem to be solved by the invention is to provide a system for predicting daily sales which does not rely on inventory control caretaker's experience and which brings a stable result of prediction in a short time.

[Means for solving the problem]

(Omitted)

[Mode for carrying out the invention]

Fig. 1 shows the system constitution of the apparatus for predicting daily sales, and Fig. 2 shows a flow chart executed by said system.

At first, the worker inputs a date of which daily sales is predicted via an input device such as a keyboard.

Actual daily sales records are stored in advance in the sales data file associated with the date and the day of the week.

The central processing unit (CPU), being instructed by the control program stored in the main memory, reads data of the past few weeks, each being the same day of the week as that of the day of which daily sails is predicted, and calculates the average of said data. The average of said data is utilized as the first predicted value.

It is empirically known that using actual daily sales records in three to four weeks is preferable.

Then the CPU, being instructed by the control program stored in the main memory, reads variable condition data, such as probability of raining obtained from the weather forecast, from the variable condition data file, said variable condition data being associated with the date of which daily sails of commodities is predicted, reads correction rule being stored in the correction rule file in advance.

(Note: Correction rule is such as "If it rains from morning till evening, then 30% decease of the sales is expected." It is supposed that detail of the correction rules is fully supported by the description of the invention.)

Finally, the CPU, being instructed by the control program stored in the main memory, corrects the first predicted value based on said correction rule corresponding to the variable condition data, and determines the second predicted value.

The second predicted value is used as the final predicted data and is obtained from the output device as a printer.

[Working example]

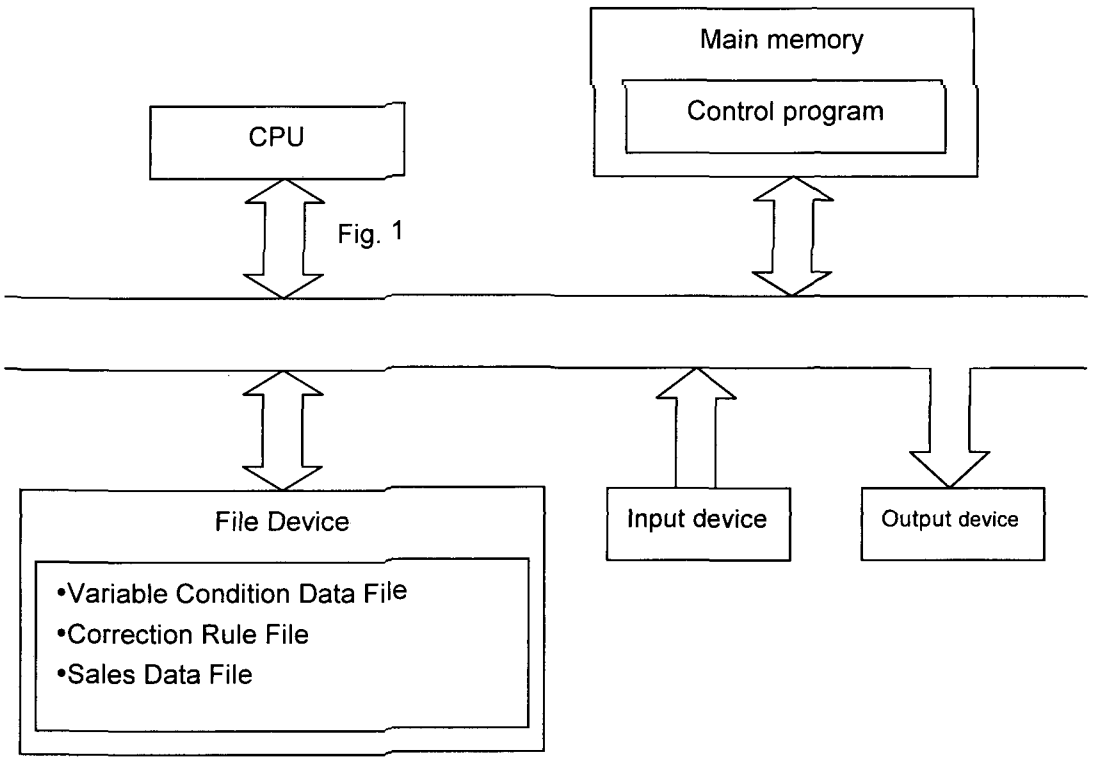
(Note: It is supposed that each components of the mode for carrying out the invention, how to fix correction rules, etc. are fully supported by the working example.)

[Brief description of the drawings]

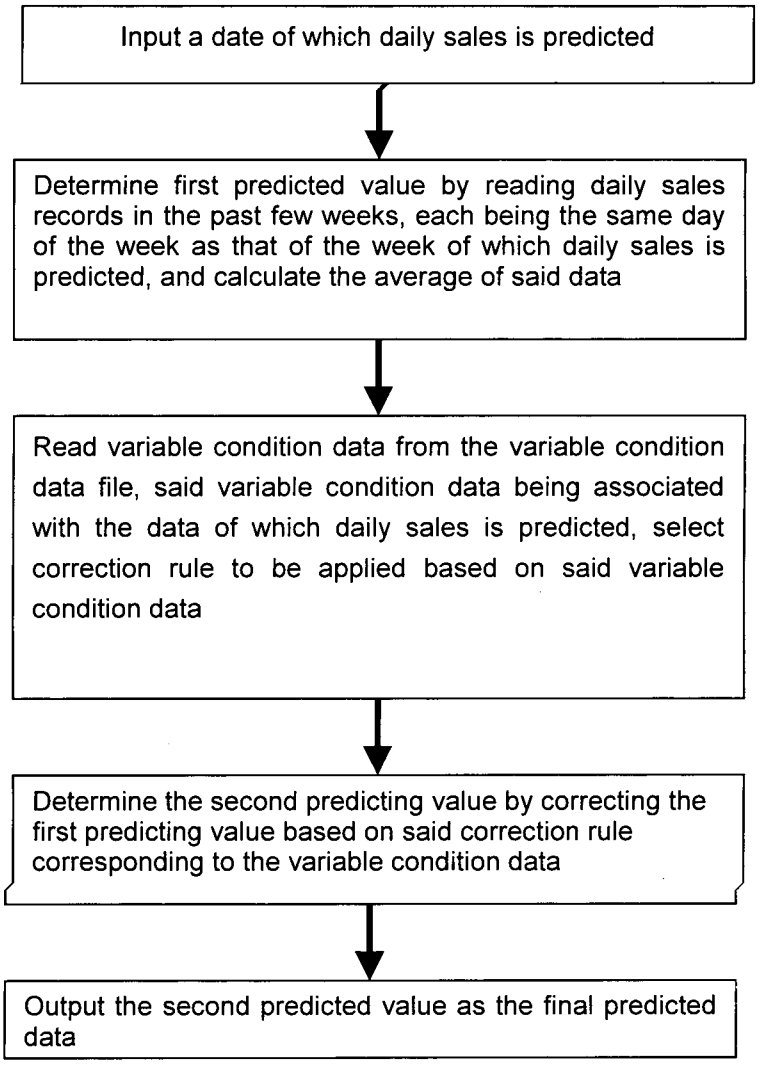
(Omitted)

[Drawings]

[Figure 1] System Constitution of the Apparatus for Predicting Daily Sales



[Figure 2] Flow Chart



[Conclusion]

[Claim 1] The invention regarding claim 1 constitutes a "statutory invention."

[Claim 2] The invention regarding claim 2 constitutes a "statutory invention."

[Claim 3] The invention regarding claim 3 constitutes a "statutory invention."

[Explanation]

[Claim 1]

Claimed invention identified on the basis of the definition in claim 1 is;

"A computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

a means for inputting the date of which daily sales is predicted;

a sales data storage means prepared for storing data representing actual daily sales records;

a variable condition rule storage means prepared for storing data representing variable condition;

a correction rule storage means prepared for storing correction data;

a means for getting the first predicted value by reading data representing daily sales records in the past few weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

a means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date of which daily sales of the commodities is predicted, and selecting correction rules to be applied to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

a means for determining the second predicted value by correcting the first predicting value based on said correction rule to be applied; and

a means for outputting the second predicted value."

Claimed invention identified on the basis of the definition in claim 1, in which processing for predicting daily sales of commodities based on various variable conditions and correction rules is realized by a practical means in which the software and the hardware resources cooperatively working, said practical means comprising a multiple of storage means and control means to read and select data from said storage means, can be said that information processing by software is concretely performed using the hardware resources.

It follows, therefore, the invention regarding claim 1 is considered to constitute a "statutory invention."

[Claim 2]

Claimed invention identified on the basis of the definition in claim 2 is;

"A computer-readable storage medium containing thereon a computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

a means for inputting the date of which daily sales is predicted;

a sales data storage means prepared for storing data representing actual daily sales records;

a variable condition rule storage means prepared for storing data representing variable condition;

a correction rule storage means prepared for storing correction data;

a means for getting the first predicted value by reading data representing daily sales records in the past few weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

a means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date of which daily sales of the commodities is predicted, and selecting correction rules to be applied to be applied