ALGORITHMS FOCUSED ON EVENT DESIGN BASED ON ARTIFICIAL INTELLIGENCE TECHNOLOGIES

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Eight types of events are designed and used in web documents used on computer networks. They include:

- user Interface events : users

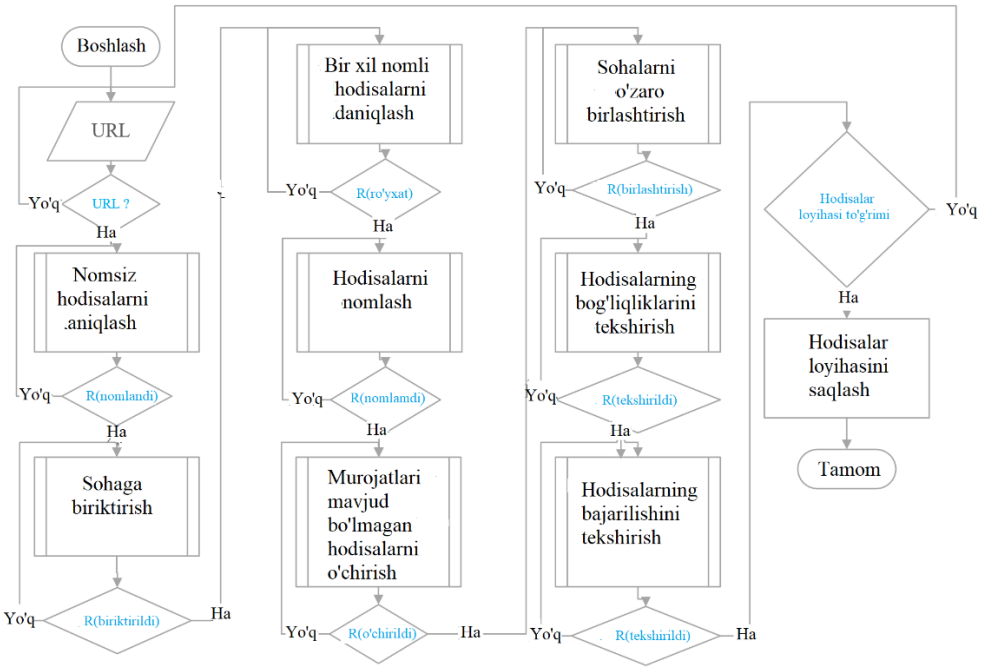
events that are carried out or performed by ;
Focus and blur events: cursor change
events intended to apply current changes and actions to objects with;
Mouse events: based on mouse movements
events to be carried out
Keyboard events: when the keyboard is pressed
events to be carried out;
Form events: tied to form properties,
independently executed events
Mutation events and observers:
events of combining and replacing objects;
HTML5 events - HTML5 tags and their functions
object-oriented and linear events with specific features;
CSS events: associated with CSS classes and properties,
their automatic modification and other events, events that cause changes.

These phenomena can never be used alone. They always work together in harmony. The main reason for this is that they support each other.

Each event has a unique ID name, input and output parameters, a function that describes the main functional purpose of the event, and a name that describes the event.

This means that all events in a web document are interconnected and require a special design algorithm or approach to control them.

Properly designing events in web documents improves the quality of their work and ensures the correct sorting of content information. The following algorithm is recommended for implementing event design control.



2.9 . General algorithm for project control of events.

The general algorithm uses eight auxiliary algorithms. The capabilities of these algorithms allow you to control the design of events. It is recommended to constantly change the auxiliary algorithms or replace them with other algorithms. In general, the contents of these algorithms are as follows:

First algorithm - Detecting unnamed events: in this process, a small or partially complete programmer can directly write unimportant events (such as clear()). Such events may be repeated several times. A list of the contents of a given DOM document is searched for a combination of events such as [event =], [click=] with the action [=] , and once found , the part of their name after [=] is written to the appropriate field of the event.

The second algorithm is called S- type binding: it analyzes all the fields and objects of the web document. As in the example above, events are bound to fields based on the binding. That is, HTML CSS JS events are sorted separately. This is done using a unique identifier and name. HTML It is recommended to use [id] , CSS [#] , and JS [name] .

The third algorithm - Detecting events with the same name: this searches for similarities of individual names across domains. A previously identified event name is searched for in all domains such as HTML CSS JS . A special index vector of each found event is opened and the index of that event is calculated. The indices of all events are determined, sorted, and the indices of events with the same name are given as the complete result.

Fourth algorithm - Naming events : A list of events with similar names and their location in the field are provided as index vectors. Each name is checked against this vector, as well as other events, i.e., the index is unique. If the index does not match, then the event with the same name and internal naming may be different. A list of existing event names and names corresponding to the index is formed. The names in the first index are compared one by one with the names in the general list. If a name is found to be unique, it is stopped at this name and the current event is given this name and the content is completely replaced according to the index. If all the names in the index are available, this is done by adding a number to the end of the name and creating a name.

Fifth algorithm - Deleting events that do not have references: such events are usually used to delete events that are used and then no longer used. All events that do not have an id in HTML tags and do not have a reference in the JS script are identified. In this, a vector of events is created by field. In these vectors , a list of all events that do not occur in the HTML tag, JS script vector, and that do not occur in at least one of them is temporarily registered.

The sixth algorithm - Combining fields: This is basically the <script></script> in JS script , the <script></script> in CSS A list of tags such as <style></style> is formed. Based on the list, a vector of current tags is created and their locations are indexed. Similar tags are identified and their beginning and end are indexed. Events or actions that are under the same tag are combined.

Seventh algorithm - Checking the dependencies of events : Each event must be associated with exactly one event. All user events used in a web document are associated with system events. The user performs an event on an object and this event is associated with a mouse click event. All of these are checked. This often leads to chaining of links in the tree .

Eighth algorithm - Checking the execution of events : This algorithm is implemented based on the server's instructions. In this case, the web document is copied and the automatic object checking mode is set . The automatic mode checks each object and its associated events, just like the user. If there are errors, the checking is stopped at that point.

Conclusion: This work analyzes the issues of event design and control in web documents. The proposed algorithms serve to increase the stability and efficiency of web systems by identifying, naming, linking and verifying events. This approach is of great importance in the intelligent management of modern web applications.

LITERATURE

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