4.5 Pages:

4.5.1 Start page (index page):

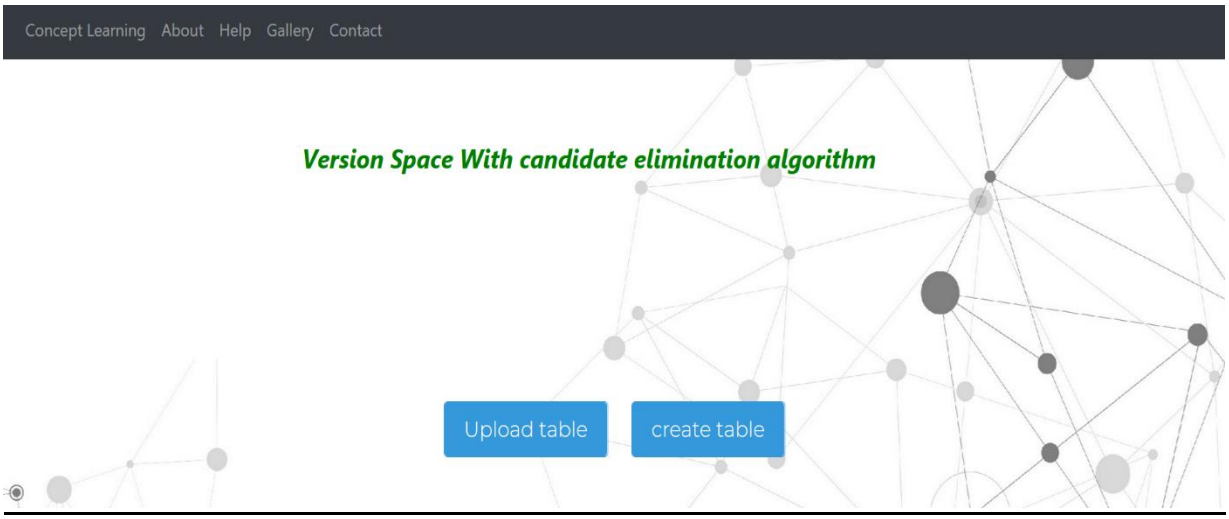
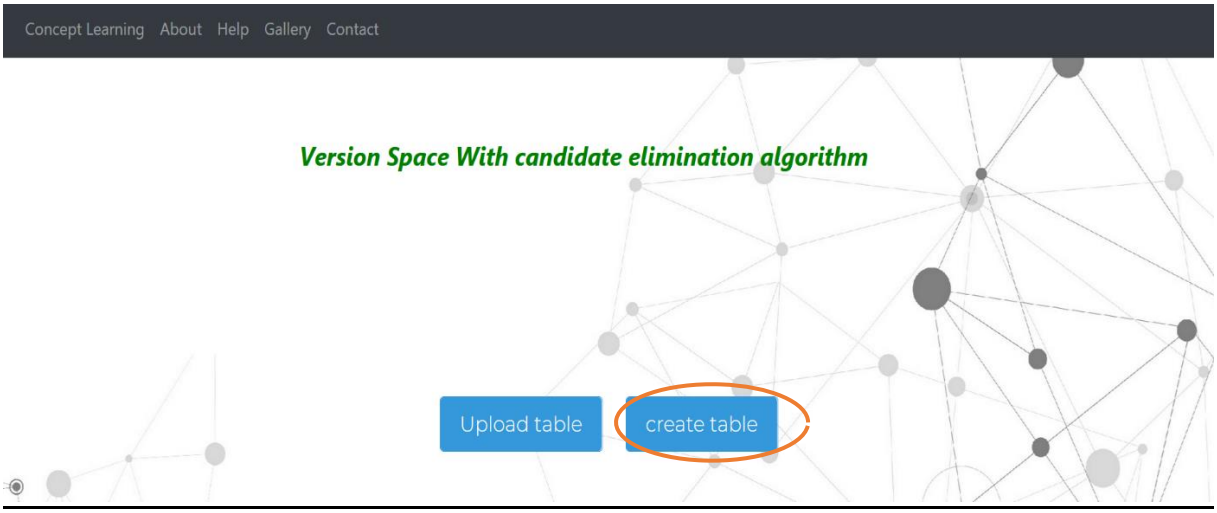


Figure 4.5.1: Start page (Index page).

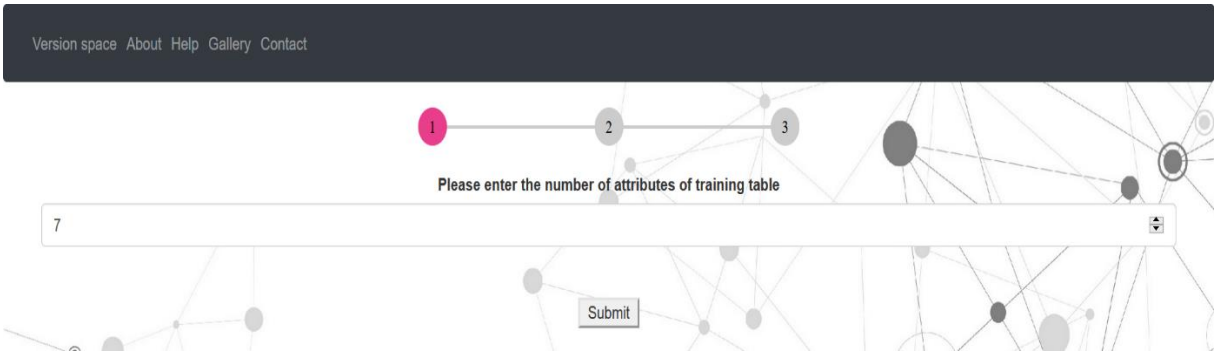
The above picture shows the first page of the website. The user can navigate to the createTable page by clicking on the button (create Table) and navigate to the UploadTable page by clicking on the UploadTable page. The navigation bar lists different buttons (Concept learning, About, Help, Contact). Every button leads to a different page.

4.5.2 CreatTable page:

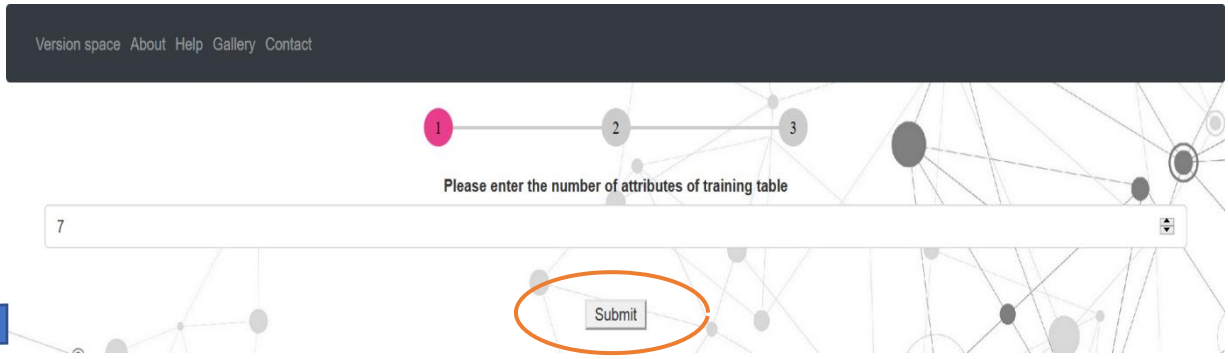
4.5.2.1 First step:



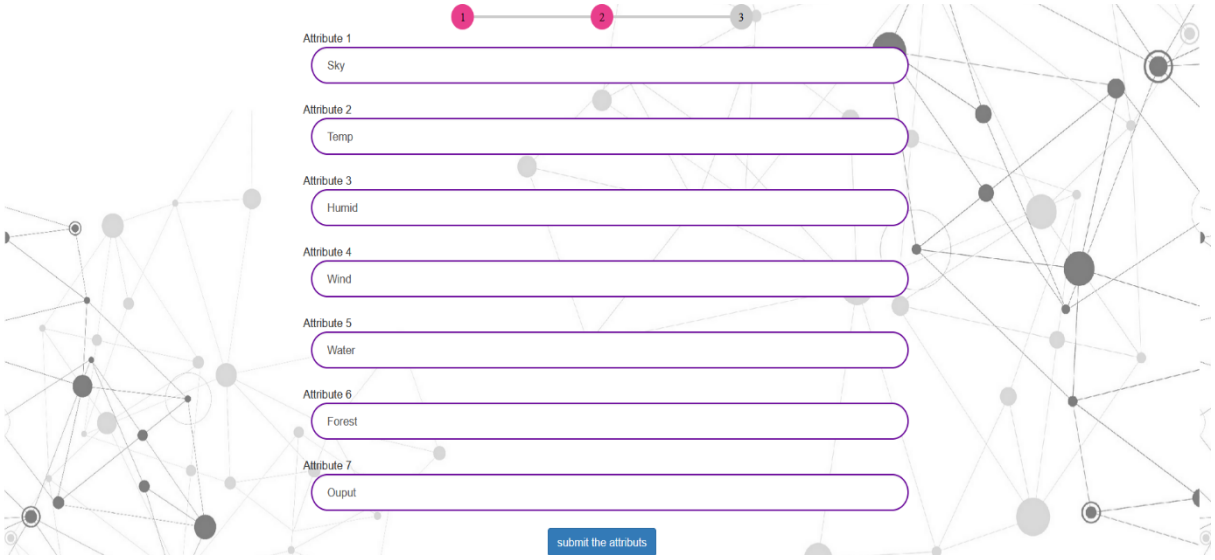
When the create Table button in the start page is clicked, the user will be navigated to the create Table Page. As explained previously, this page allows the user to create the training data table. The first step is inputting the number of attributes of the training table's header, 7, in the above example. The table header has at least one attribute, and therefore the input field takes just one positive numerical value greater than 0. If the user inputs a string value or a value less than 0, an alert message will be prompted.



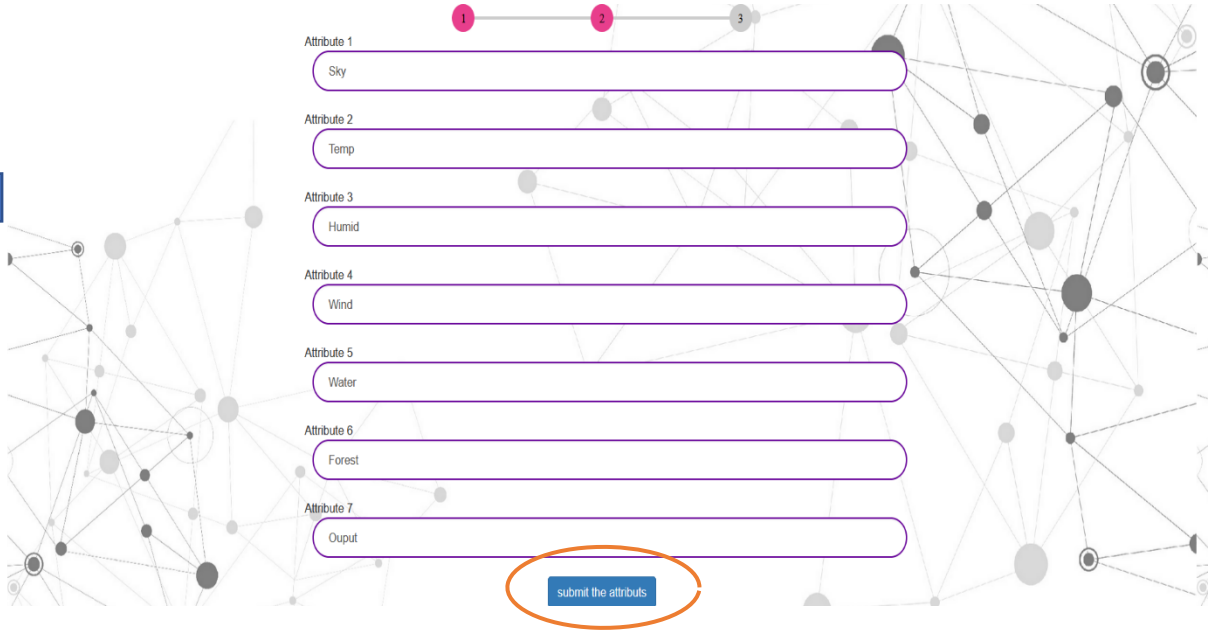
4.5.2.2 Second step:



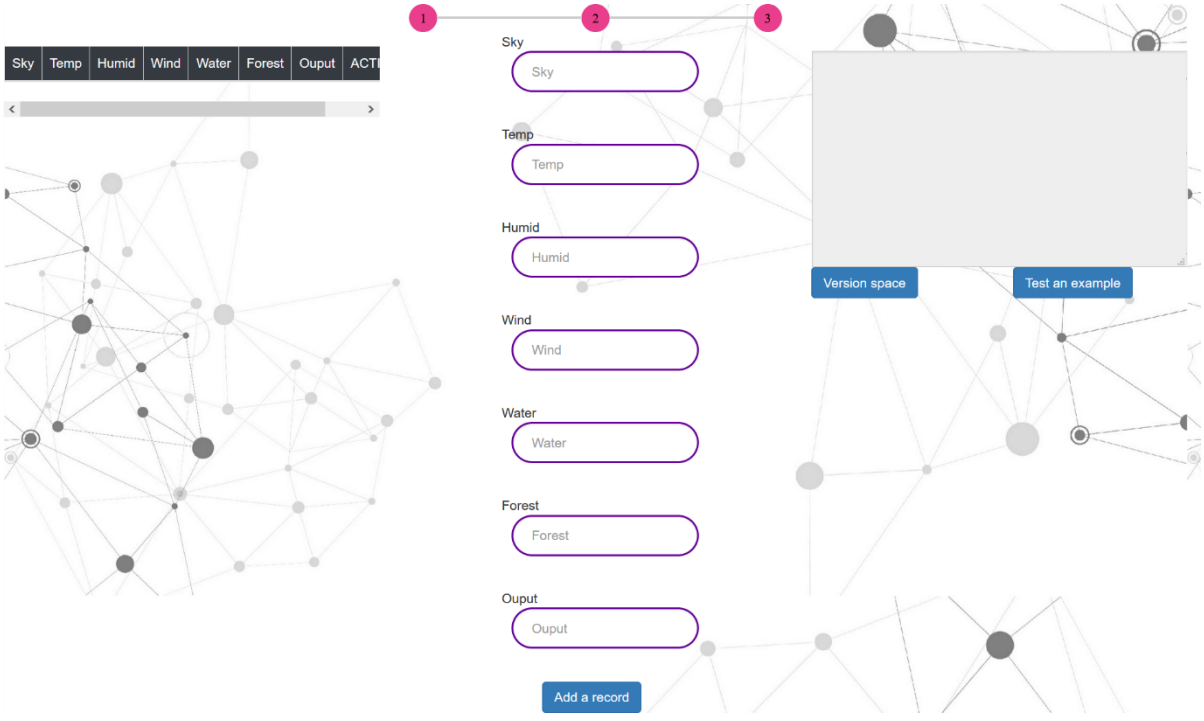
Once the number of attributes is given and submitted by the user, a form of input fields will be shown, where the user can input the header attributes of the table. The number of input fields matches the number that the user enters on the first page, which is 7.



4.5.2.3 Third Step:

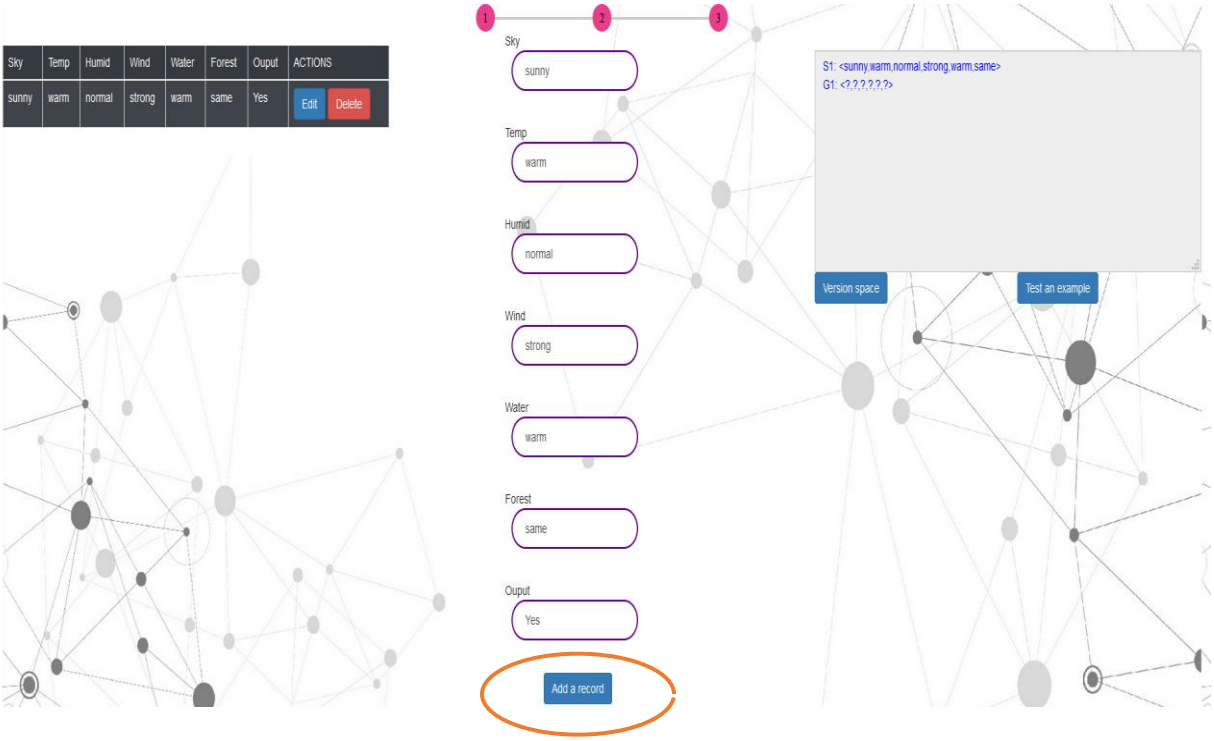


When all attributes are given and submitted by the user, the last page will be shown. It consists of three components, on the right side the training data table with its header attributes given by the user, a form of input fields that enables the user to add records to the table, and on the right side a text area, where the border sets S and G can be displayed. Whenever a training example is added to the table, the border sets S and G will be presented in the text area on the right side , so that the user can see what happens by adding an example and how the border sets change.

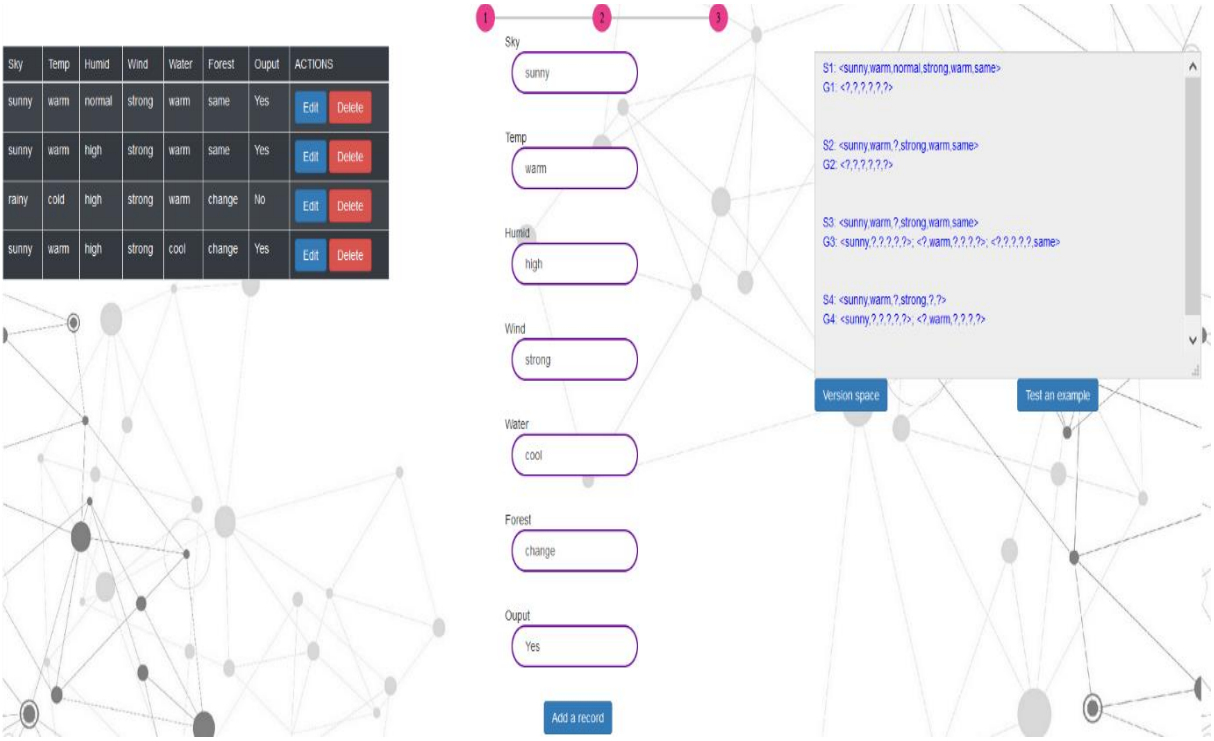


4.5.2.4 Features:

4.5.2.4.1 Add to table feature:

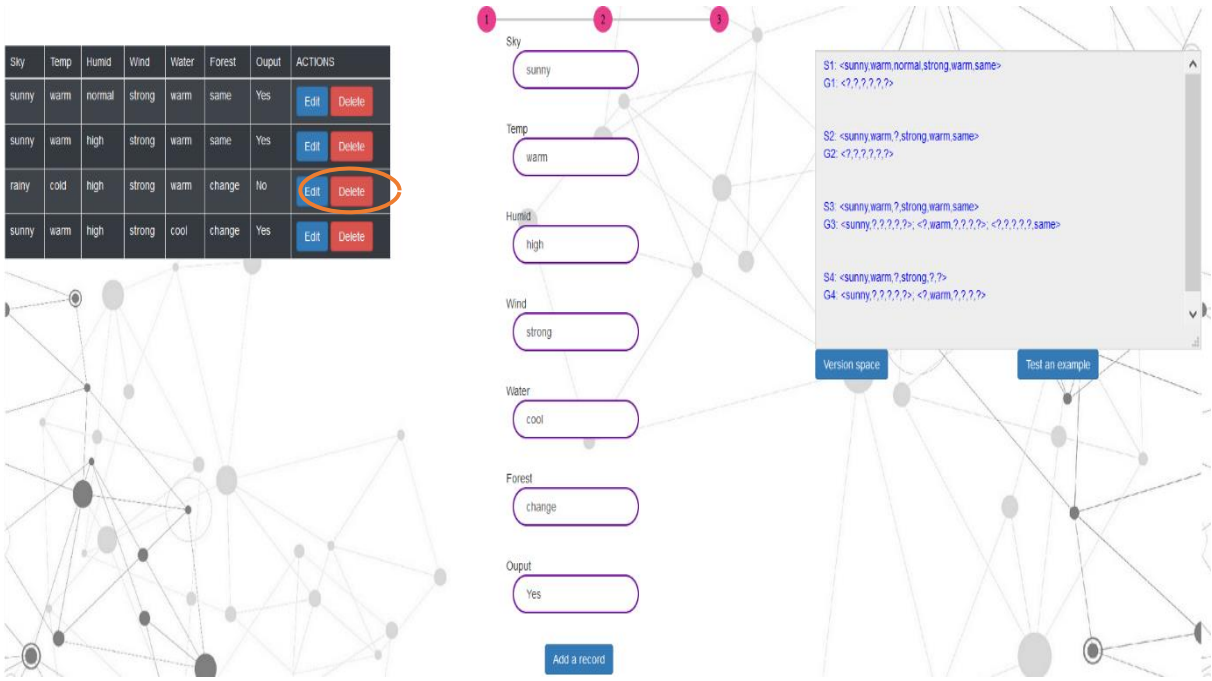


When a new instance is added to the table, the border sets S and G change accordingly. From the above picture, it can be seen that by adding the first example, S1 and G1 get initialized. Furthermore, every row in the table can be deleted or edited using the “Edit” and “Delete.” buttons.

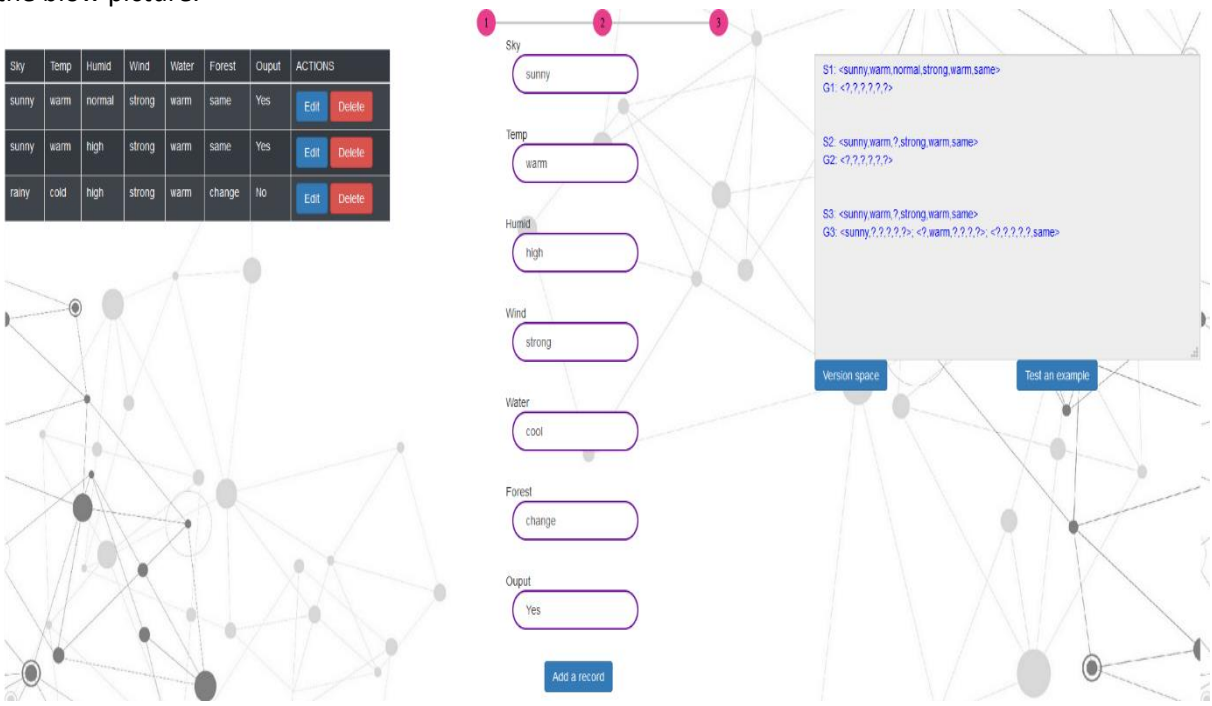


This picture shows how the page should be looking after adding all training examples to the table. The text area on the right side displays the border sets' changes by adding every new example.

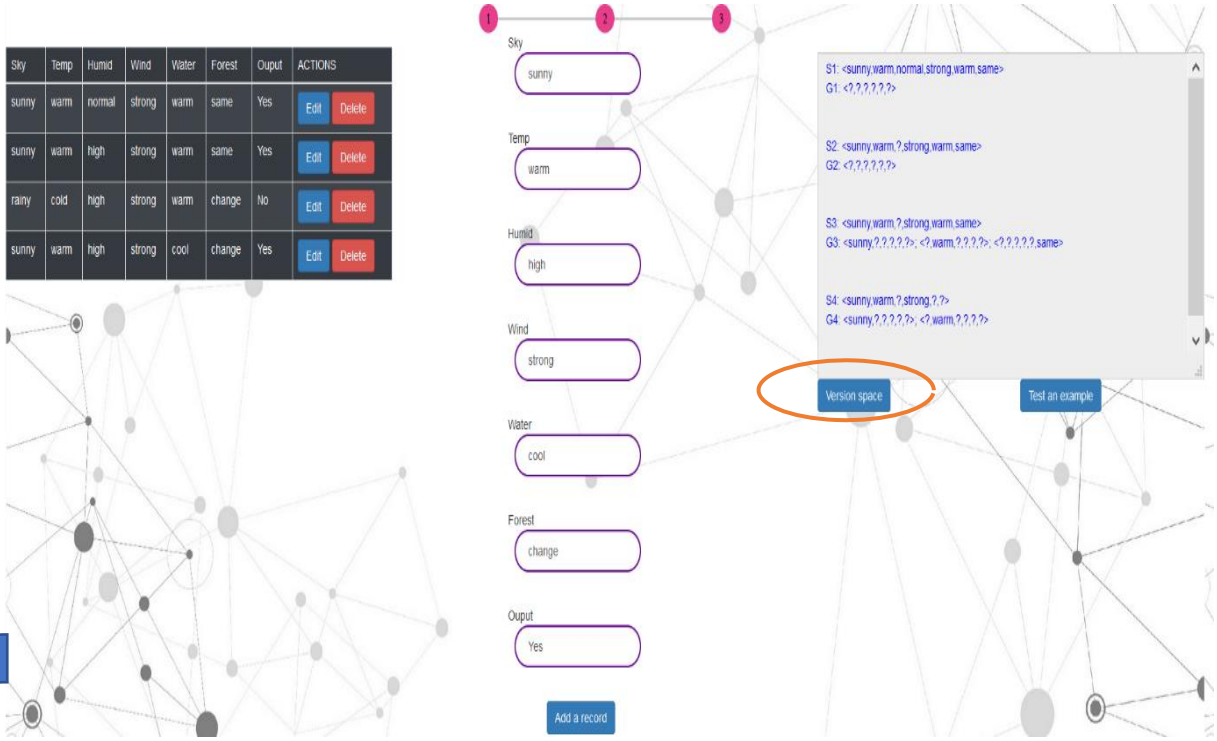
4.5.2.4.2 Delete row Feature:



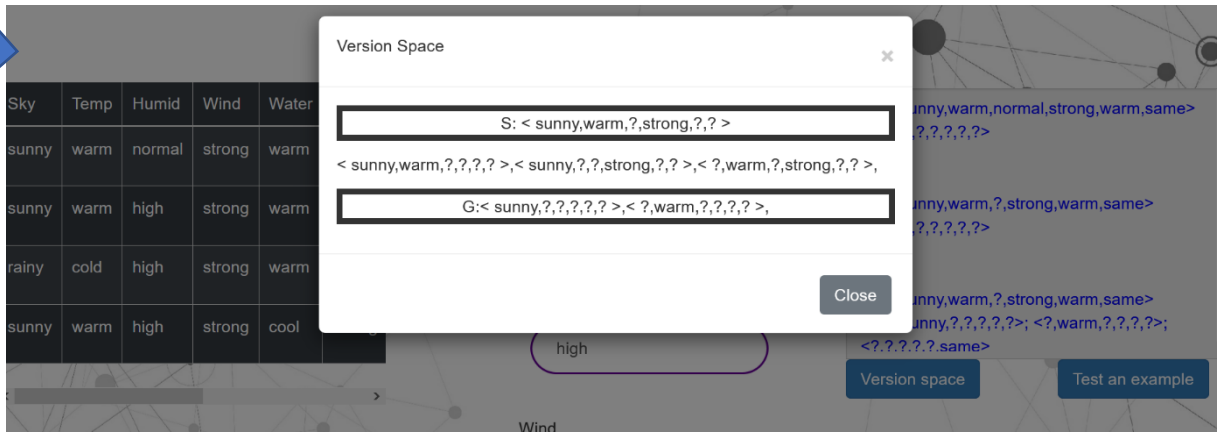
When the user deletes a training example, he/she can click on the delete button at the observed example. After deleting the example, the border sets S and G should be altered accordingly as shown in the blow picture.



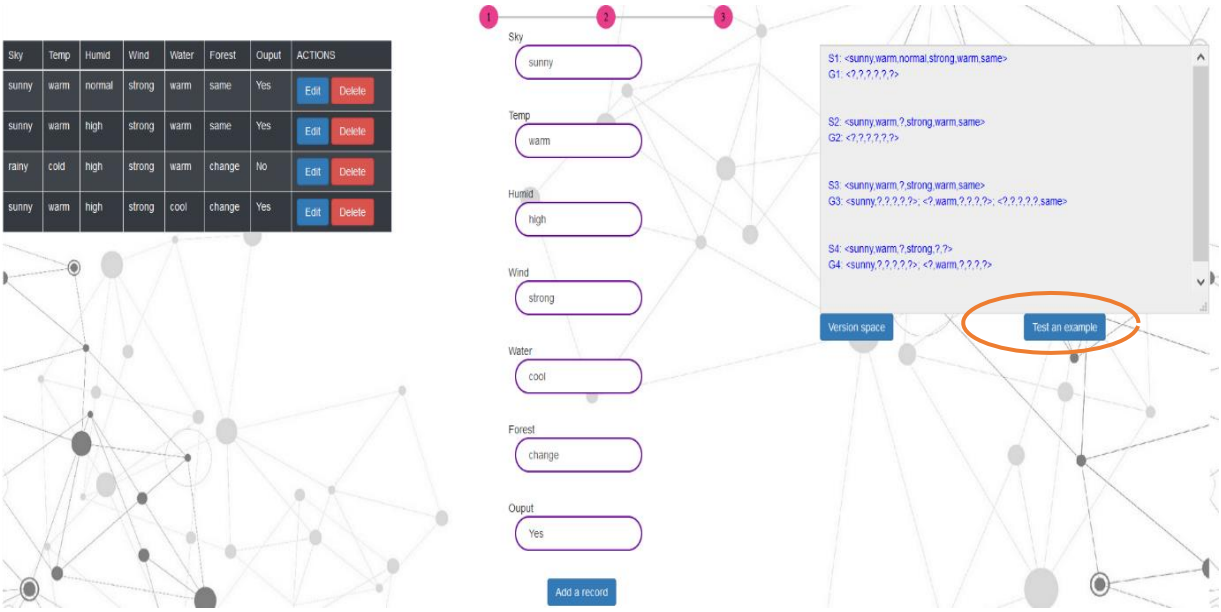
4.5.2.4.3 Display version space feature:



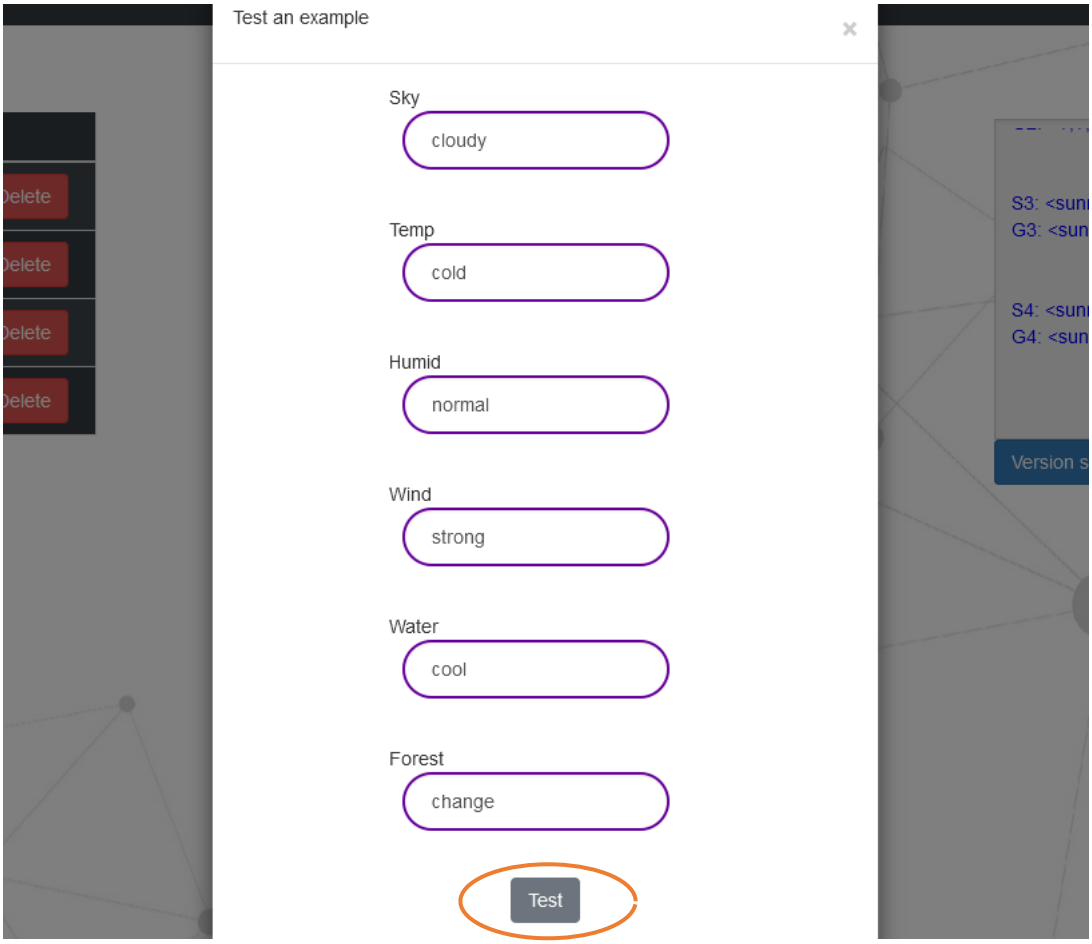
When the version space button is clicked, the version space will be displayed. The border sets S and G are bordered with bold black color. Between S and G are all hypotheses that cover the training examples.



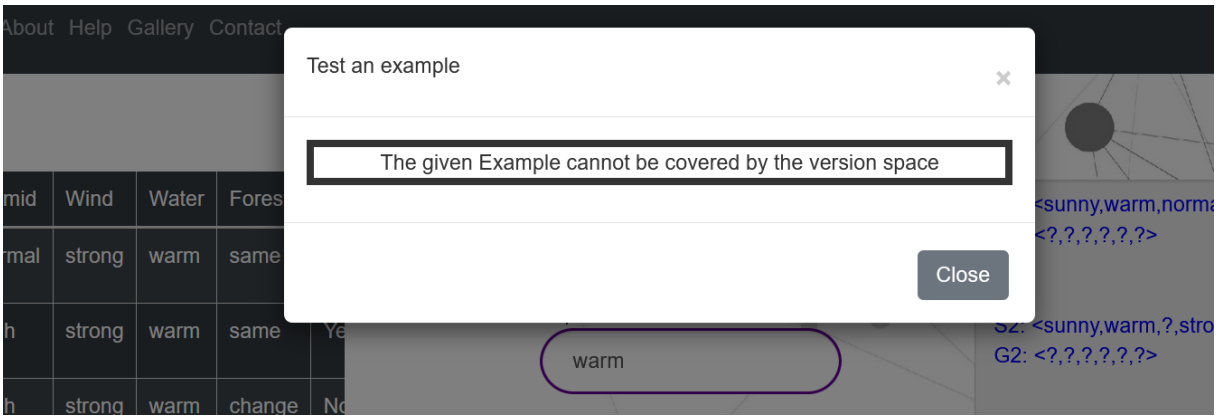
4.5.2.4.4 Test an example feature:



After the version space is generated, the user can test whether a specific example can be covered by the version space or not. When the "Test an example" button is clicked, a form of input fields will be displayed, where the user can enter the values of the test example.



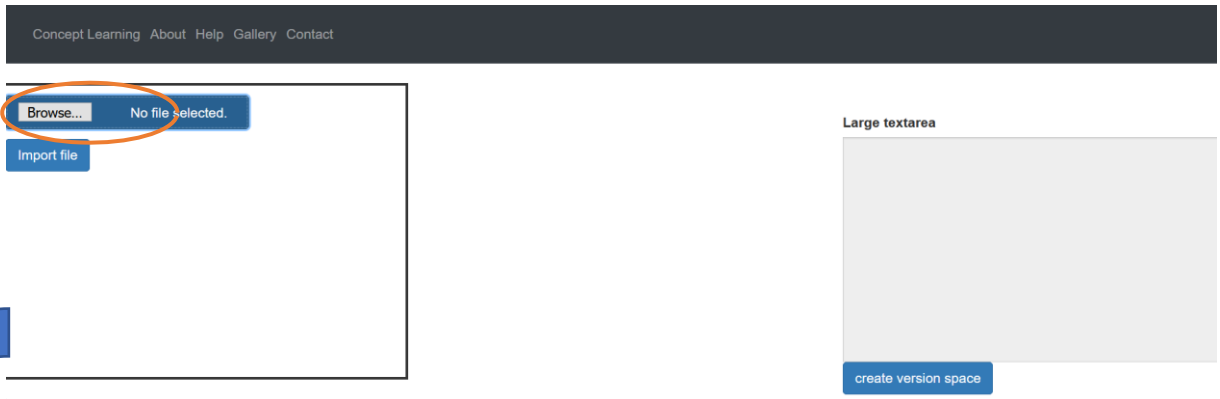
Once alle values of the test example are given, then it can be tested, whether the given example is covered by the version space or not. The given example cannot be covered by the user.



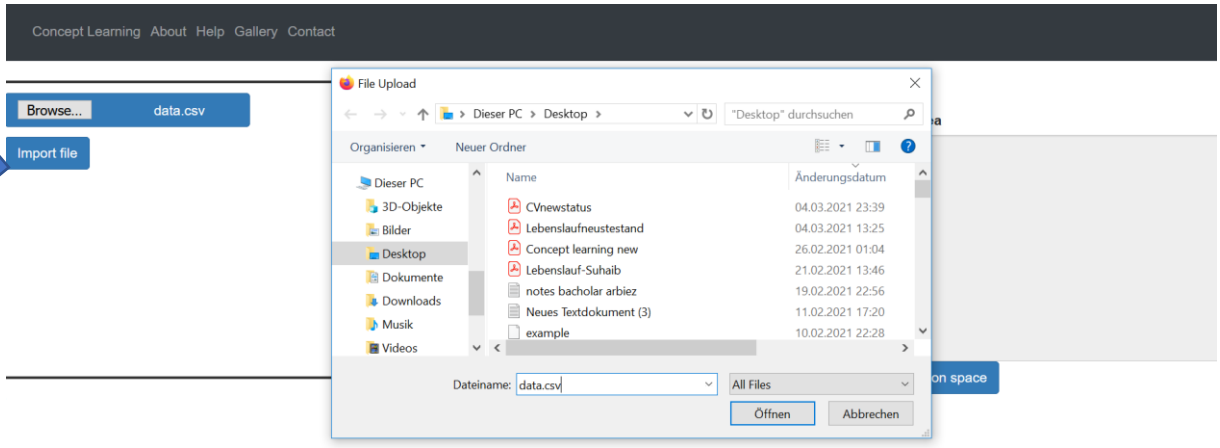
4.5.3 UploadTable page:

This page enables the user to upload a training table from his/ her computer and run the candidate elimination algorithm to generate the version space.

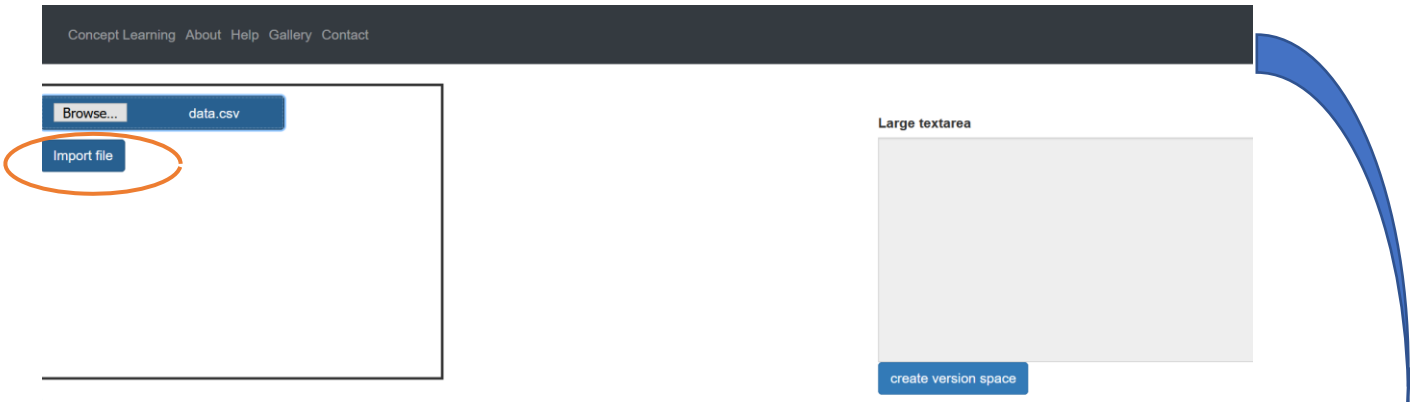
4.5.3.1 First step:



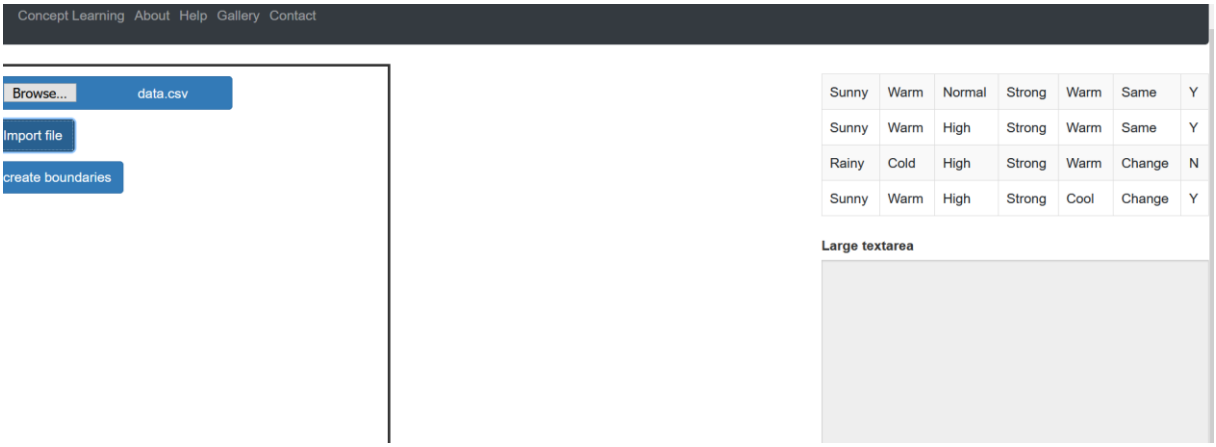
When the user clicks on the “Browse” button, he/she will have the ability to navigate through the computer and chose the file that contains the training data. It is very important that the chosen file is extended with (.csv (comma separated value)), otherwise an exception will be thrown and an alert message will be shown to the user.



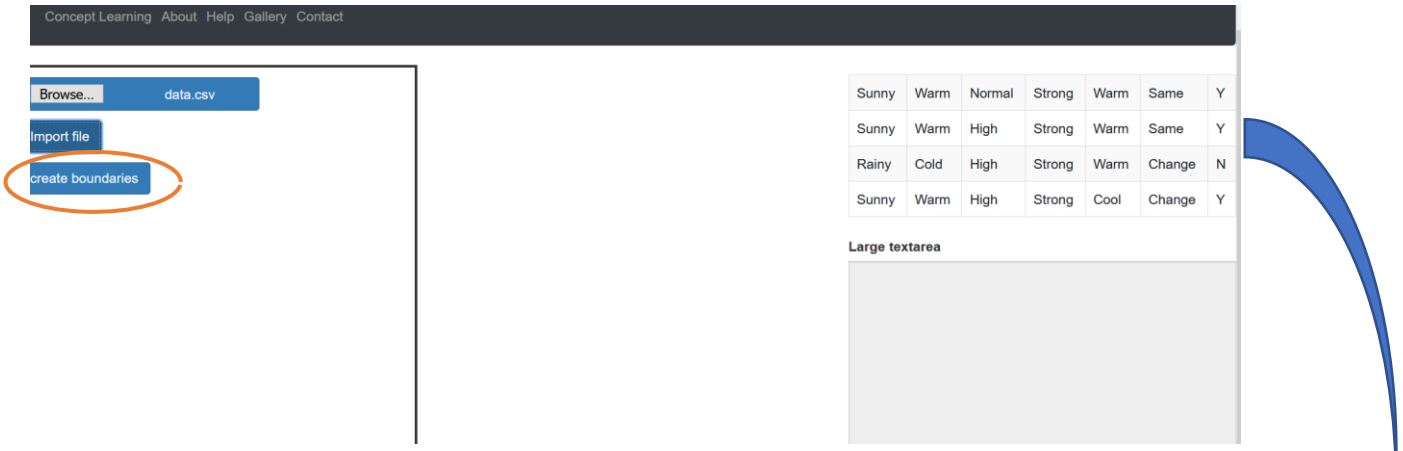
4.5.3.2 second step:



Once the user has chosen the file that contains the training table from the computer, he/she can import it into the website by clicking on the “import file” button. The table will be displayed on the right side of the website containing all data.

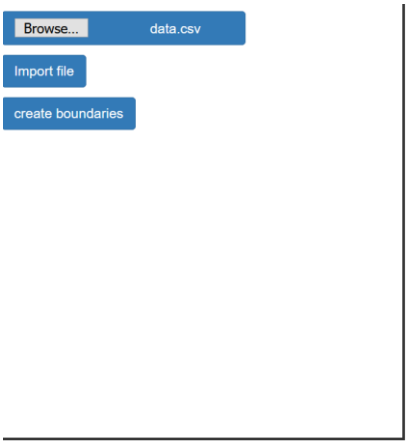


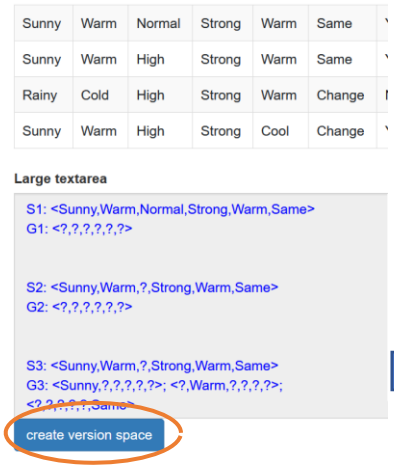
4.5.3.3 Third step:



When the user clicks on the “create boundaries” button, the version space boundaries will be created and displayed in the text area.

4.5.3.4 last step:





When the “create version space” button is clicked, the version space will be displayed with its border sets and the hypotheses that lie between them.