

language, for instance. Generally, a data structure is a definition of a structure of data, e.g., field: name (string), field: age (integer), field: address (string). For instance, referring to **FIG. 2**, each flight in frame **209** (i.e., line **209a** in frame **209** is a populated record (or data structure). A data structure object is a static object. It can be assigned to another object, defined within another object or neither.

[0043] The next four symbols 10, 11, 12, 13 shown in **FIG. 1** are informative symbols that do not represent objects, but other significant types of program aspects or elements in object oriented programming.

[0044] Symbol 10 represents data transfer. More specifically, symbol 10 represents data being transferred from one place to another. An example would be a socket connection between two objects for the purpose of transferring data there between. Thus, data transfer objects represent a relationship between two other objects, i.e., the two objects between which data is being transferred.

[0045] Symbol 11 represents a connection with a database. Assignment of a database to a window or other object means that the window can access the database. A database can be generally assigned to the whole application, in which case it would be assigned to the highest level application OED. Databases generally will not be defined within another object, as databases generally exist on their own and do not require another object to exist. However, they generally will not be useful unless they are assigned to another object, i.e., are available for use by another object.

[0046] Symbol 12 represents inheritance. Once again, inheritance is a well known aspect of object oriented programming and was previously discussed and, therefore, will not be described in detail herein. In brief, an object will inherit the attributes, methods, and functions of its parent class, for instance, which will be represented by this symbol drawn between the class object and the object that inherits that class' properties. Inheritance is not an object per se nor is it aptly categorized as either assigned to or defined within an object. Instead, inheritance, by definition, is a relationship between two other objects.

[0047] Symbol 13 represents a remote link between two objects. Remote links may be links between two applications. For example, RMIs (Remote Method Invocations) and RPCs (Remote Procedure Calls) are well known remote links in the Java programming language. A remote link is different from a data transfer in that a data transfer pertains to the transfer of data between two objects, whereas a remote link pertains to the invocation of a method in a different machine or object. It encompasses remote procedure calls and remote method invocations. Like inheritance and data transfer objects, a remote link is not an object per se nor is it aptly categorized as assigned to or defined within an object, as they represent accessibility of methods between two objects.

[0048] Finally, Symbol 14 is a generic symbol that represents all other types of objects not represented by one of the symbols 1-13. Generally, although not necessarily, it is used to represent static objects such as static text, single-line edits, multi-line edits, edit marks, list boxes, drop-down boxes, group boxes, labels, graphics, animations, etc.

[0049] Having defined the object and other symbols in accordance with one particular embodiment of the inven-

tion, let us now refer to a specific example of use of the present invention to document an application in an OED. **FIG. 2** is a graphical user interface, and, particularly, a web page, generated by an application that one might find in a typical business website. Particularly, **FIG. 2** is a web page **200** that one might find on a travel service website with which a user can interface in order to find and book airplane flights. The web page comprises two windows, a main, "FLIGHTS" window **201a** and a "FLIGHTS RESULTS" window **201b**. **FIG. 3** shows the main FLIGHTS window **201a** disembodied from the web page **200** while **FIG. 4** shows the FLIGHT RESULTS window **201b** disembodied from the web page. The FLIGHTS RESULTS window **201b** fits within the main FLIGHTS window **201a** in the web page **200**.

[0050] The web page **200** could just as readily have been composed as a single window containing the exact same elements. However, as is often the case with web sites and other applications, many, if not all, of the pages of a website or display screens (i.e., GUIs) of an application have identical primary components, such as the menu bar at the top, the title bar at the top, one or more tool bars, etc. Therefore, it often makes sense to code as a separate window a "main" window that can be re-used in all (or many) of the web pages and then code the more specific or unique portions of each web page (or other GUI) as a separate window to appear within the main window.

[0051] As can be seen in the Figures, there are a number of buttons that the user may click upon in both windows **201a** and **201b** in order to cause something to occur. Referring first to the main window **201a** (**FIG. 3**), for instance, it includes the following buttons; NEW button **202**, OPEN button **204**, FLIGHTS button **206**, CITIES button **208**, PHONES button **210**, PROGRAMS button **212**, NEWS button **214**, CALENDAR button **216**, and HELP button **218**. The window also includes a menu bar **221** including typical menus, e.g., FILE menu **222**, EDIT menu **225**, TRAVEL menu **227**, TRIP menu **229**, OPTIONS menu **231**, WINDOW menu **233**, and HELP menu **235**.

[0052] The FLIGHTS RESULTS window **201b** is shown in **FIG. 4** disembodied from the web page **200** and includes another set of buttons, including: SEARCH button **250**, CLOSE button **252**, DETAILS button **254**, RETURN TRIP button **256**, BUILD CONNECTION button **258**, ADD TO TRIP button **260**, PRINT button **262**, SEE ALSO button **264**, AIRLINES button **266**, DIRECT button **268**, CONNECTING button **270**, DEPART button **272**, and ARRIVE button **274**. There is a frame **290** in which flight information records **292** are displayed responsive to a customer's particular query. It further includes one or more text boxes, "FROM" box **280**, "TO" box **282**, "TIME" box **284**, "AIRLINES" boxes **286**, and "DATE" box **288**. Other items in the flights results window **201b** include static items, such as the text above the flight information frame, i.e., DAYS text **292**, FLIGHT text **293**, DEPART text **294**, ARRIVE text **295**, CLASS text **296**, EQP text **297**, STOP text **298**, and DURATION text **299**.

[0053] One familiar with typical e-business web pages can readily imagine the programming that might be associated with the various buttons, menus, frames, records and boxes on the web page **200** and, therefore, they will not be discussed in detail. In any event, as will become clear, the