



Figure 1 – MVC Model

Using the concepts of Jinja2 template inheritance to create the hierarchy of views, the base template is created. But each of our child templates display a different view of our data.

MVC architecture was used when creating a website for sales automation of IE Bogdanovich. The purpose of the research was to create a convenient and user-friendly website-catalog for IE Bogdanovich with a full description of the products, prices, reviews and contacts for communication.

**Kirill Brigi**

(Fr. Skorina GSU, Gomel)

Scientific advisor **Vladimir Kulichenko**, senior lecturer

**CREATION OF TECHNOLOGICAL  
NETWORKS FOR CONTROLLING MACHINE TOOLS  
WITH CNC SYSTEMS**

The process of creating a technological network for controlling CNC machines. Target characteristics of network interfaces:

Functional design. Includes the study of those tasks, the possibility of its implementation, preparation of an approximate list of equipment and methods of achieving goals, according to those assignment. The functions of individual machines, their interaction in the general process, the number of units involved are outlined.

Schematic design. It includes the definition of the interface for interaction with machine tools, its schematic implementation for each piece of equipment, the choice of a protocol for transferring data between machines and the control system.

Applied design. It includes the development of electrical schematic diagrams for the entire line, including each piece of equipment, the choice of materials and components for the implementation of the assembly of the system. It also includes the development of software taking into account the exchange of data, their processing, displaying on the means of control and the interaction of individual pieces of equipment in various situations and when setting various tasks. Completes the design phase with the creation of a set of documentation that allows you to correctly implement the project and ensure its reproducibility in the future.

Assembly and testing. Includes physical assembly, according to the developed documentation and verification of the project for compliance with those assignment. If necessary, adjustments are made to the software or hardware to achieve the required quality of the system.

Operation. Includes post-project industrial operation with the accumulation of statistics of errors and failures to further improve the properties of the system.

**Mikhail Bouzdalkin**

(Fr. Skorina GSU, Gomel)

Scientific adviser **Viktar Liauchuk**, Ph.D. in technics, associate professor

## **DEVELOPMENT OF A METADATA EXPORT EXTENSION FOR CORPORATE CMS**

In modern projects using Content Management Systems, situations arise in which it is necessary to replicate metadata to external storages for backup, more convenient conversion aggregation and presentation of metadata.

Corporate CMS Alfresco has many extension points, which can be used to develop a metadata export system. Figure 1 shows the class interaction scheme.