## Model tile laying system

Consider the problem of laying tiles of different colors and geometric shapes: square, regular triangle, hexagon, octagon. The main function of the system being created is to assist the user in creating on the field (computer screen) the desired multi-colored ornament (pattern) of the tile when it is tightly laid.

The system user must be able to:

* add tiles of the specified color and geometric shape to the required place of the field; change the location or remove already laid tiles;
* group several tiles - in order to then operate the entire resulting group (move, rotate, delete, change the color);
* having selected a certain tile or a group of tiles, multiply it on the field (in this case, the system cyclically repeats the selected tile / group on the field);
* save the resulting ornament on a disk file and read the previously saved ornament from the file into the working window;
* open several windows with different ornaments and create a new ornament by copying fragments of others.

It is required that the specified actions the user can perform in an arbitrary order convenient for him. If necessary, you should provide for scrolling of the displayed ornament.