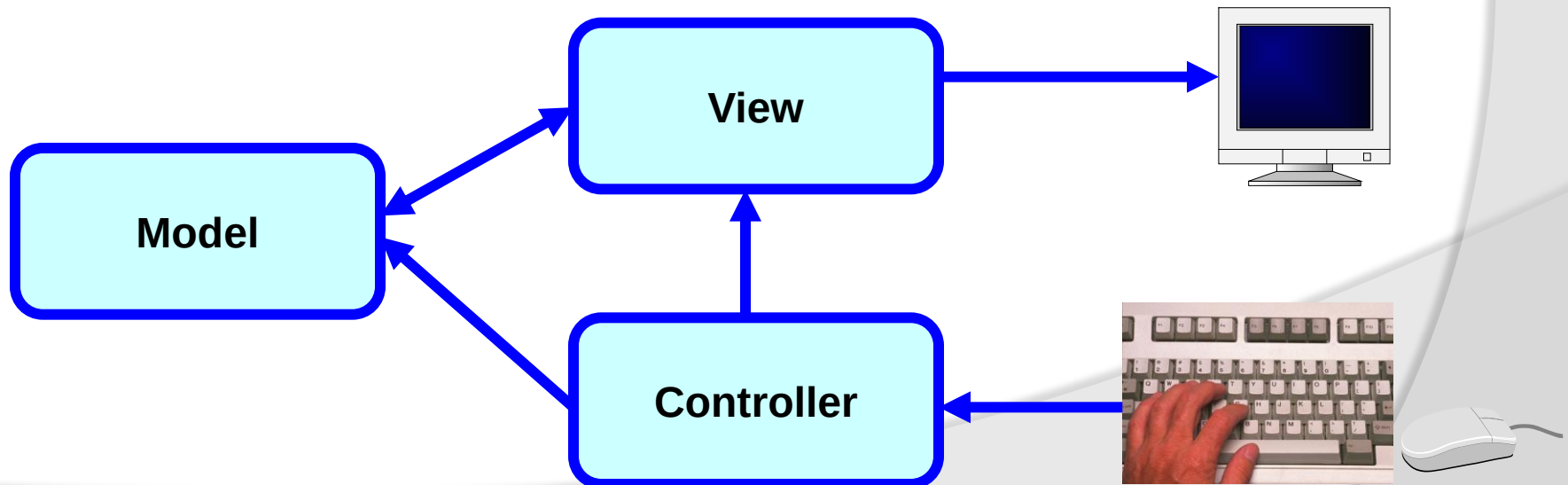


Announcements

- ❖ Check class announcements daily
- ❖ You must implement programming projects by yourself

Model-View-Controller (MVC)

- ❖ Model for GUI programming (Xerox PARC '78)
- ❖ Separates GUI into 3 components
 1. Model $\Rightarrow$ application data
 2. View $\Rightarrow$ visual interface
 3. Controller $\Rightarrow$ user interaction



MVC Model of GUI Design

❖ Model

- ❖ Should perform actual work
- ❖ Should be independent of the GUI
 - ❖ But can provide access methods

❖ Controller

- ❖ Lets user **control** what work the program is doing
- ❖ Design of controller depends on model

❖ View

- ❖ Lets user see what the program is doing
- ❖ Should not display what controller **thinks** is happening (base display on model, not controller)

Model View-Controller

- ❖ How should we design our systems using this model?
- ❖ **Example:** AverageComputation.html,
- ❖ **Example:** AverageComputationMVC.html
- ❖ Let's think about our projects and the use of MVC

Design: 2-Dim Application (Tic Tac Toe)

- ❖ How can we implement such a system?

Design: 2-Dim Application (Order Values)

- ❖ A board has a blank piece we can move which pushes numbers in the opposite direction
- ❖ How can we implement such a system?

Design: 2-Dim Application (Sudoku)

- ❖ Sudoku validator
- ❖ How can we implement such a validator?

innerHTML property

- ❖ Property defining:
 - ❖ HTML code
 - ❖ Text occurring between the opening and closing tags of the element
- ❖ Allows you to modify/define HTML content
- ❖ **Example:** GetContent.html
- ❖ **Example:** ModifyContent.html
 - ❖ What happens if you keep selecting the Modify button?