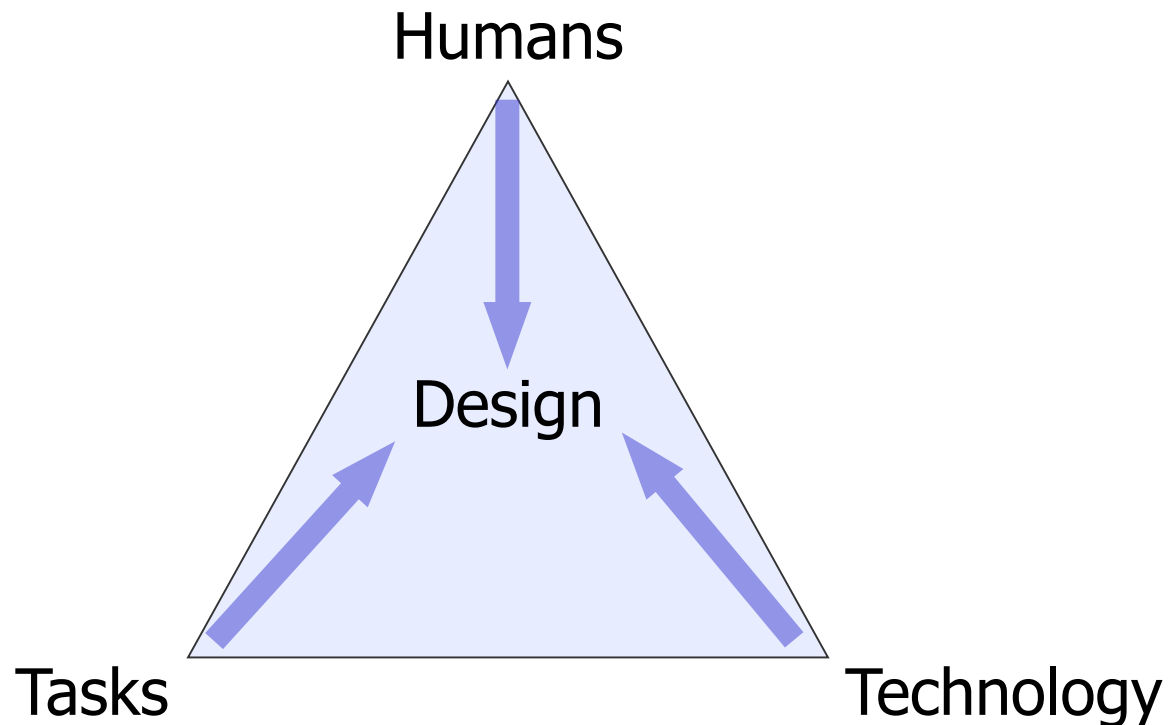

Introduction to HCI

UI design process (UCD), UI issues



HCI definition

- Design, Implementation, and Evaluation of the interactive systems from the perspective of use by the human.



Human-Computer Interaction (HCI)

- Human
 - End-user of an application
 - Collaborative environment
- Computer
 - The device running the application
 - Execution often distributed among client and server machines
- Interaction – two-way communication
 - User tells the Computer what to do (commands)
 - Computer tells the User what happened (results)



Why study the HCI?

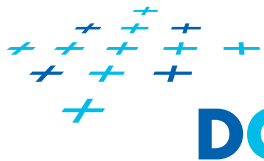
- User interface takes majority of the source code
 - Over 50% (Some authors report as much as 80%)
 - More than 50% of the implementation efforts go to the UI
- Risks of the bad UI
 - Financial (your product won't sell)
 - Lives (air or factory disasters, ...)
- Successful UI requires
 - Good knowledge of the human's abilities
 - Good knowledge of the principles of the UI design
 - Meaningful use case



Idea of HCI

„The old computing is about what computer can do, the new computing is about what people can do.“

(Ben Scheniderman)



User Interface (UI)

- The part of the technology, allowing people to:
 - Perform their own tasks
 - Interact with the technology
 - Both are indivisible



Hydroelectric power station Orlik



UI of pure physical nature



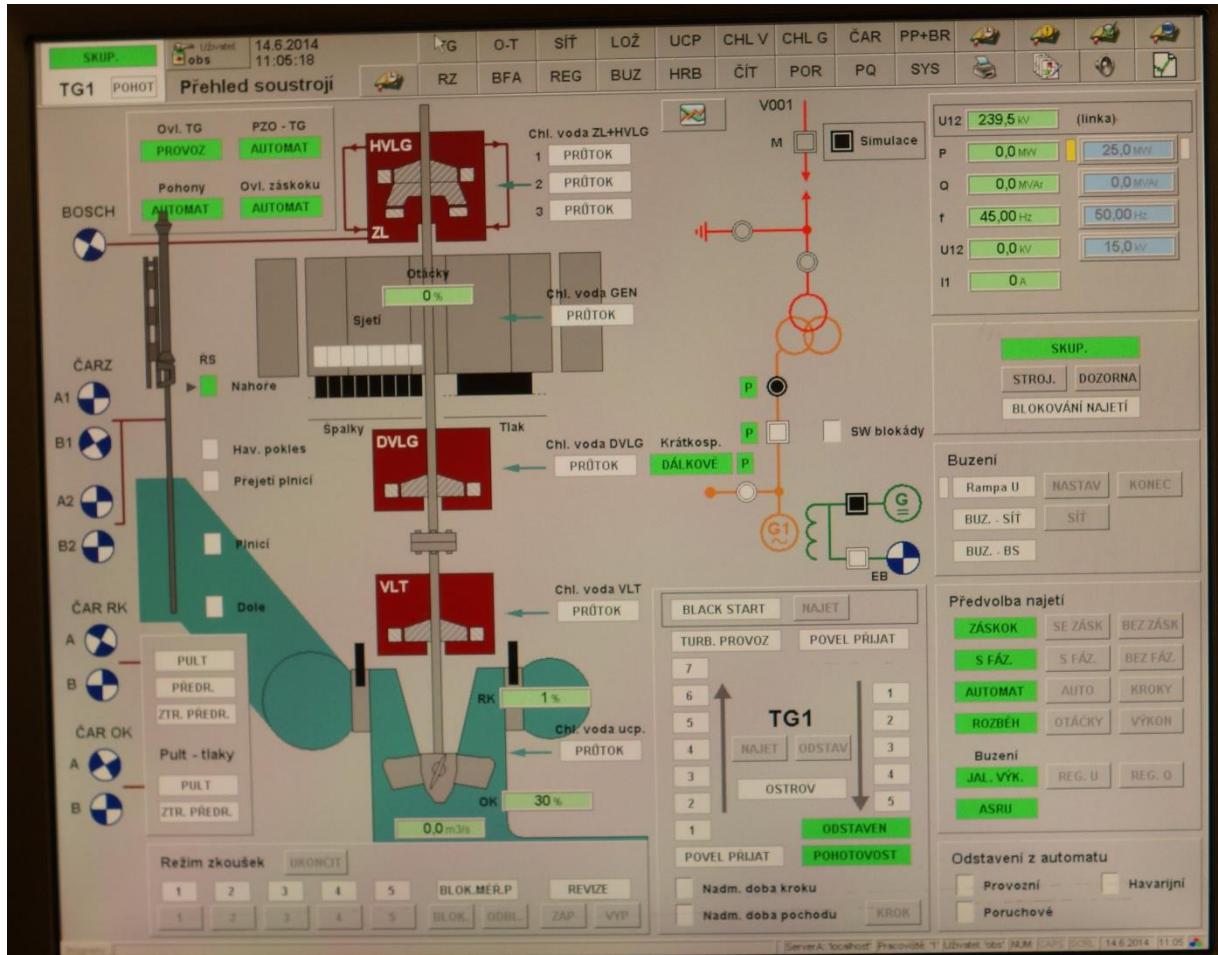
Hydroelectric power station Orlik



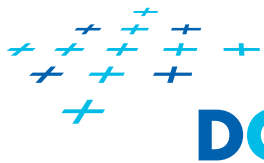
Hydroelectric power station Orlik



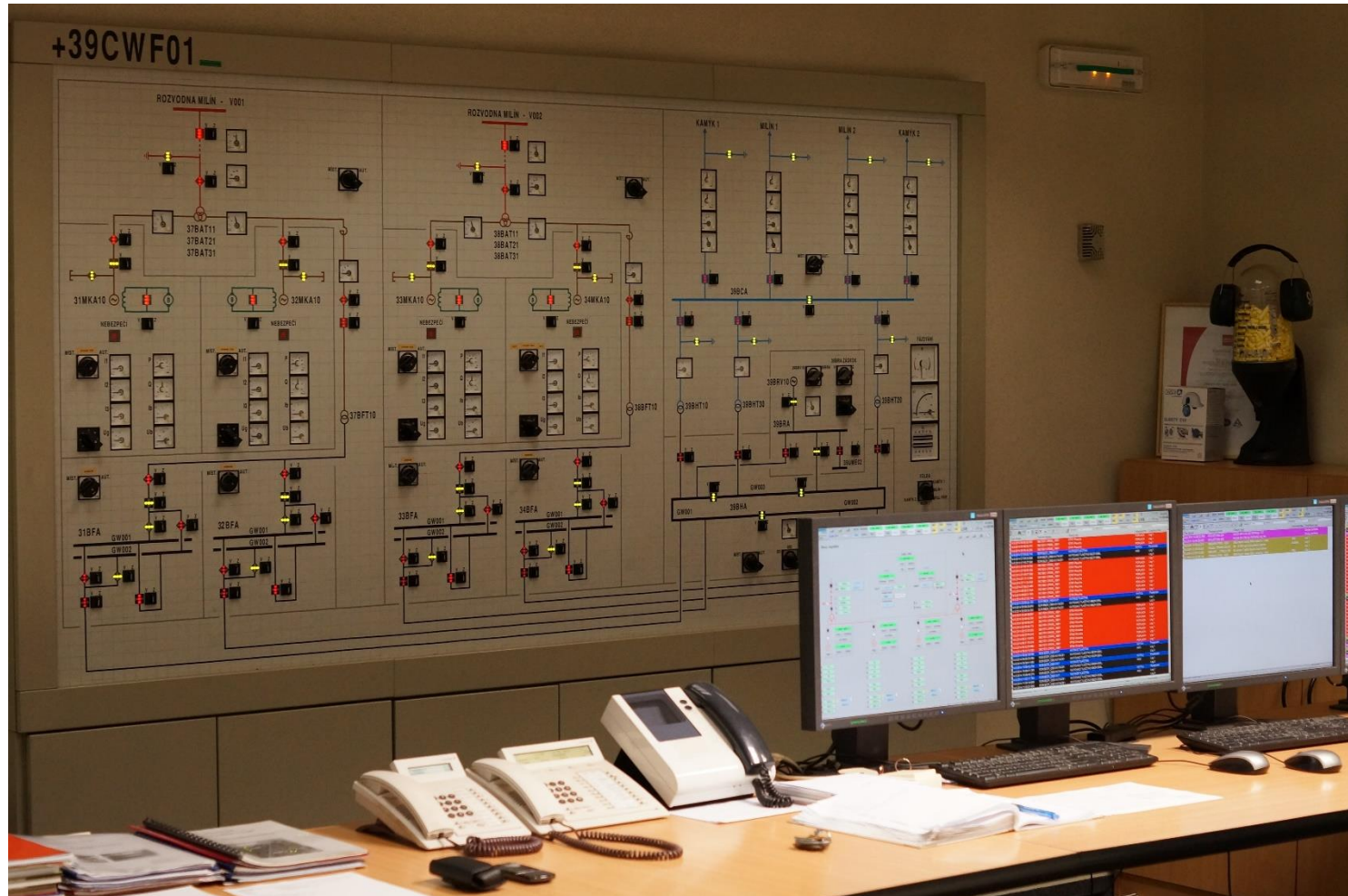
UI mimics real world



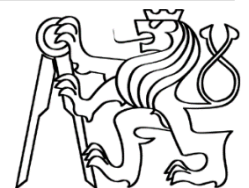
Hydroelectric power station Orlik



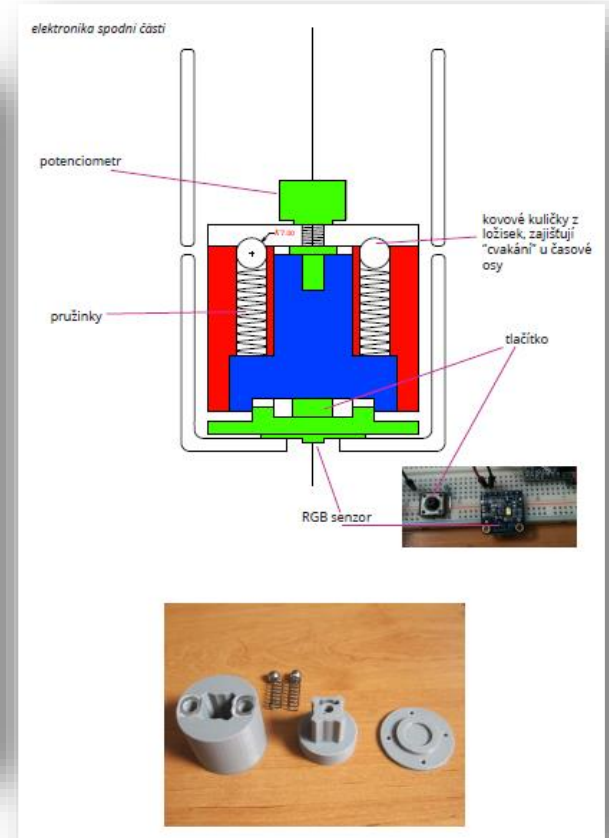
UI of complex systems



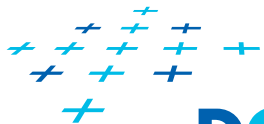
Hydroelectric power station Orlik



Blending physical and electronic world



GraFooSha



DCGI



DESIGN PROCESS

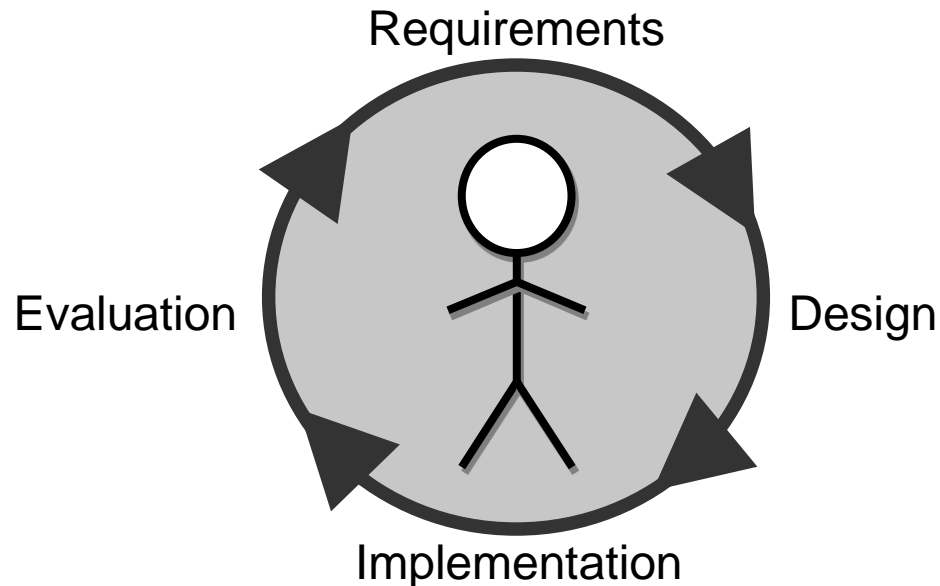


UI design

■ User Centered Design (UCD)

ISO 9241-210

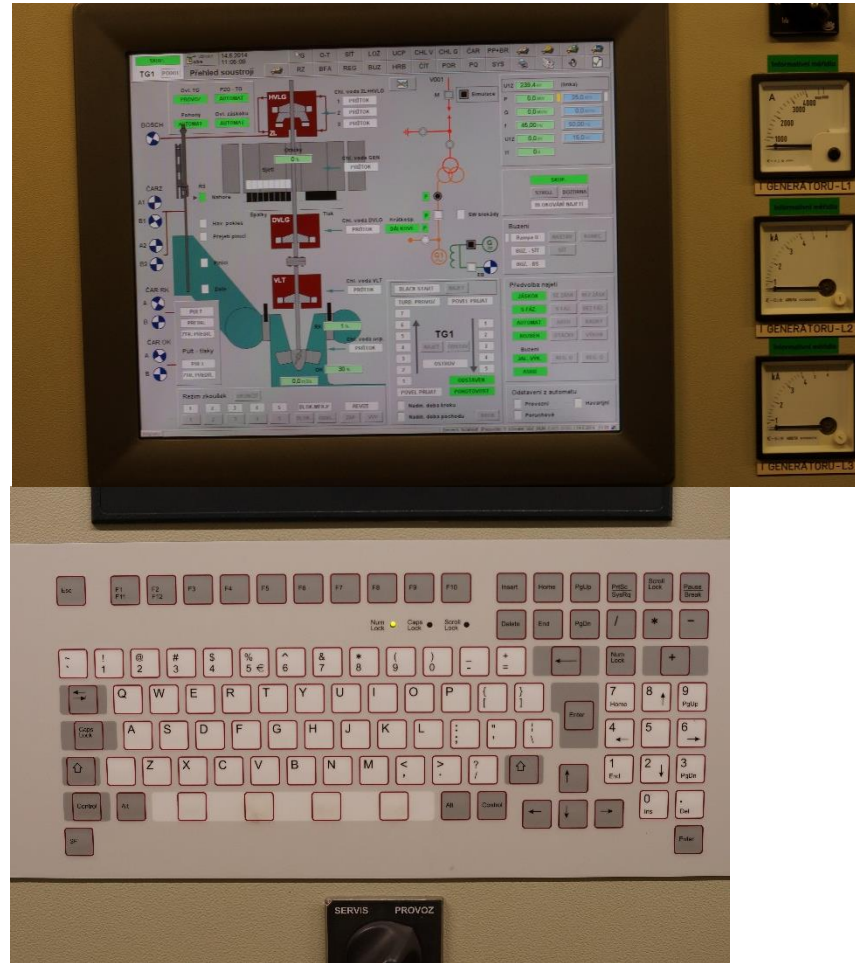
- Find what are user needs and take them into account
- You should be in permanent contact with potential users during the whole design process
 - testing of UI prototypes



Examples of bad UI design



Examples of improper UI design




Hydroelectric power station Orlik




Interaction


Audit hardware a správa licencí - přihlaste se na školení Správce IT. Kariéra [Mapa stránek](#)




MiCOS Software




ÚVOD




PRODUKTY




KE STAŽENÍ



PODPORA



SPOLEČNOST



MONITORING A SLEDOVÁNÍ AKTIVIT NA PC

Software Aktivitu umožňuje legální monitorování zaměstnanců na PC. Poskytuje detailní přehled o činnosti v rámci pracovní doby a využití software.

[více informací](#)



Feedback, Where am I?

Audit hardware a správa licencí - přihlaste se na školení Správce IT.

Kariéra Mapa stránek

MiCOS Software



ÚVOD



PRODUKTY



KE STAŽENÍ



PODPORA



SPOLEČNOST

PŘEDSTAVENÍ APLIKACE



PRODUKTY

- ▶ Aktivity
 - ▶ Představení aplikace
 - ▶ Funkcionalita
 - ▶ Právní předpis
 - ▶ Technické informace
- ▶ Správce IT
 - ▶ Představení aplikace
 - ▶ Funkcionalita
 - ▶ Technické informace
 - ▶ Případová studie
- ▶ HelpDesk
 - ▶ Představení aplikace



Functionality is not reachable

VYZKOUŠET ZDARMA



Demo

Máte dvě možnosti:

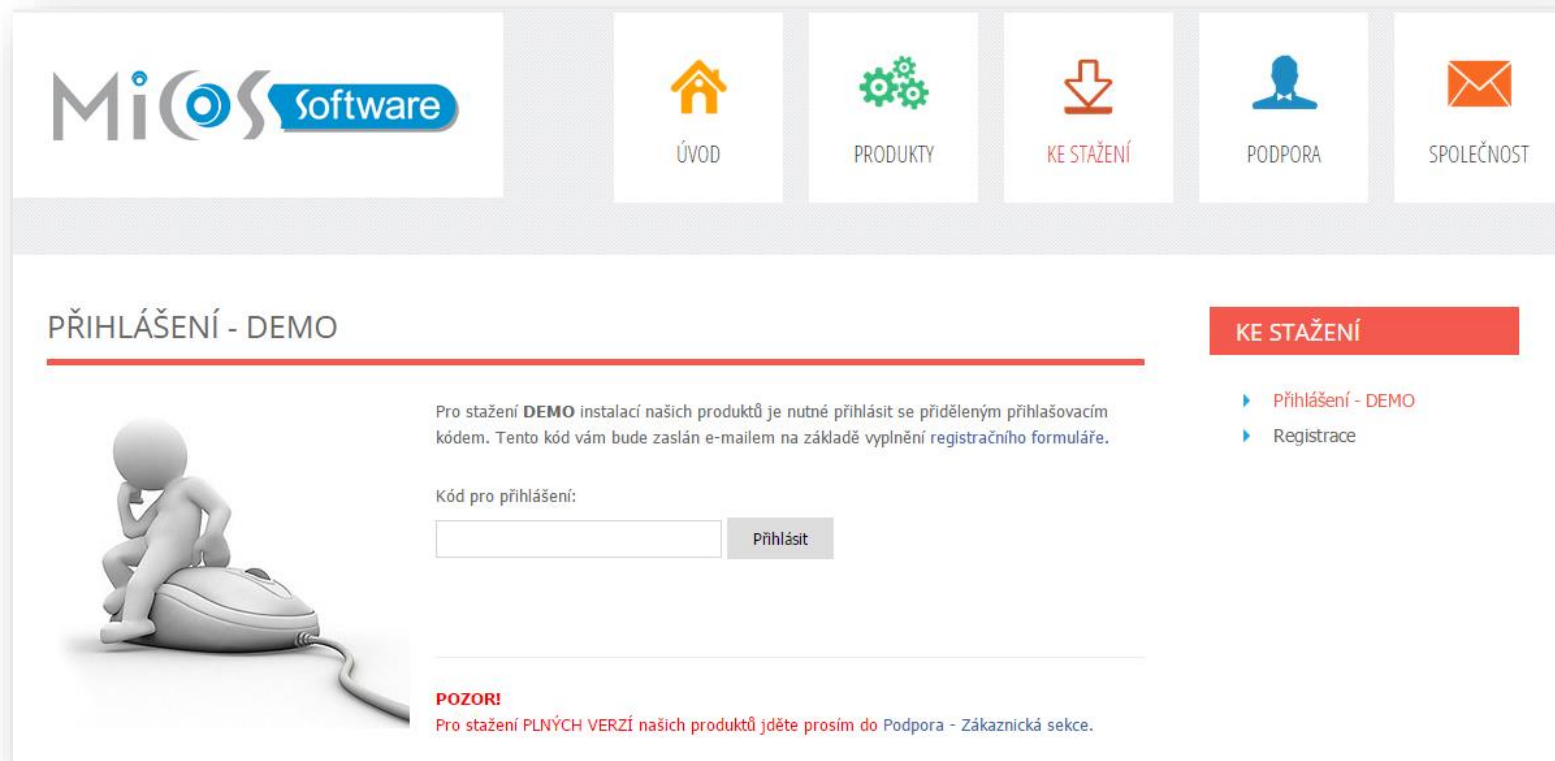
- Stáhnout aplikaci pro vyzkoušení na svém počítači
- Vyzkoušet naše ONLINE verze bez nutnosti instalace

KAM DÁLE?



- Funkcionalita - Co umí aplikace Správce IT?
- Technické informace
- Chci vidět, jak aplikace vypadá
- HelpDesk - správa požadavků a úkolů





The screenshot displays the MiCOS Software website interface. At the top, there is a navigation bar with the MiCOS Software logo on the left and five menu items: ÚVOD (Home), PRODUKTY (Products), KE STAŽENÍ (Downloads), PODPORA (Support), and SPOLEČNOST (Community). Below the navigation bar, the main content area is titled "PŘIHLÁŠENÍ - DEMO". On the left side of this section, there is a 3D illustration of a white figure sitting on a computer mouse. The main text explains that to download demo installations, users must register with a code that will be sent via email upon completion of a registration form. A registration form is provided with a text input field for the code and a "Přihlásit" (Register) button. To the right of the form, there is a red button labeled "KE STAŽENÍ" and a list of links: "Přihlášení - DEMO" and "Registrace". A warning section titled "POZOR!" (Attention!) is located below the form, advising users to go to the Support - Customer Service section for full versions of the products.

MiCOS Software

ÚVOD PRODUKTY KE STAŽENÍ PODPORA SPOLEČNOST

PŘIHLÁŠENÍ - DEMO

Pro stažení **DEMO** instalací našich produktů je nutné přihlásit se přiděleným přihlašovacím kódem. Tento kód vám bude zaslán e-mailem na základě vyplnění registračního formuláře.

Kód pro přihlášení:

POZOR!
Pro stažení **PLNÝCH VERZÍ** našich produktů jděte prosím do Podpora - Zákaznická sekce.

KE STAŽENÍ

- ▶ Přihlášení - DEMO
- ▶ Registrace



Usability

- **Simplicity of learning to use the system**
 - System can be learned easily and fast
- **Memorability = Recall (Easy to remember)**
 - Whether the user is able to use the system after a longer time
- **Efficiency**
 - Once the user learned how to use the system, the system will be fast to use
 - To carry out the task quickly and efficiently



Usability

- **Minimum amount of errors**
 - Preventing users from making errors
 - If encountered, inform the users on the cause and give an advice
- **Satisfaction of the user**
 - Subjectively pleasing
 - The users is convinced that the task has been successfully achieved



Design heuristics by Jakob Nielsen

1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose, and recover from errors
10. Help and documentation



Thank you for attention

