UNIVERSITY OF OSTRAVA
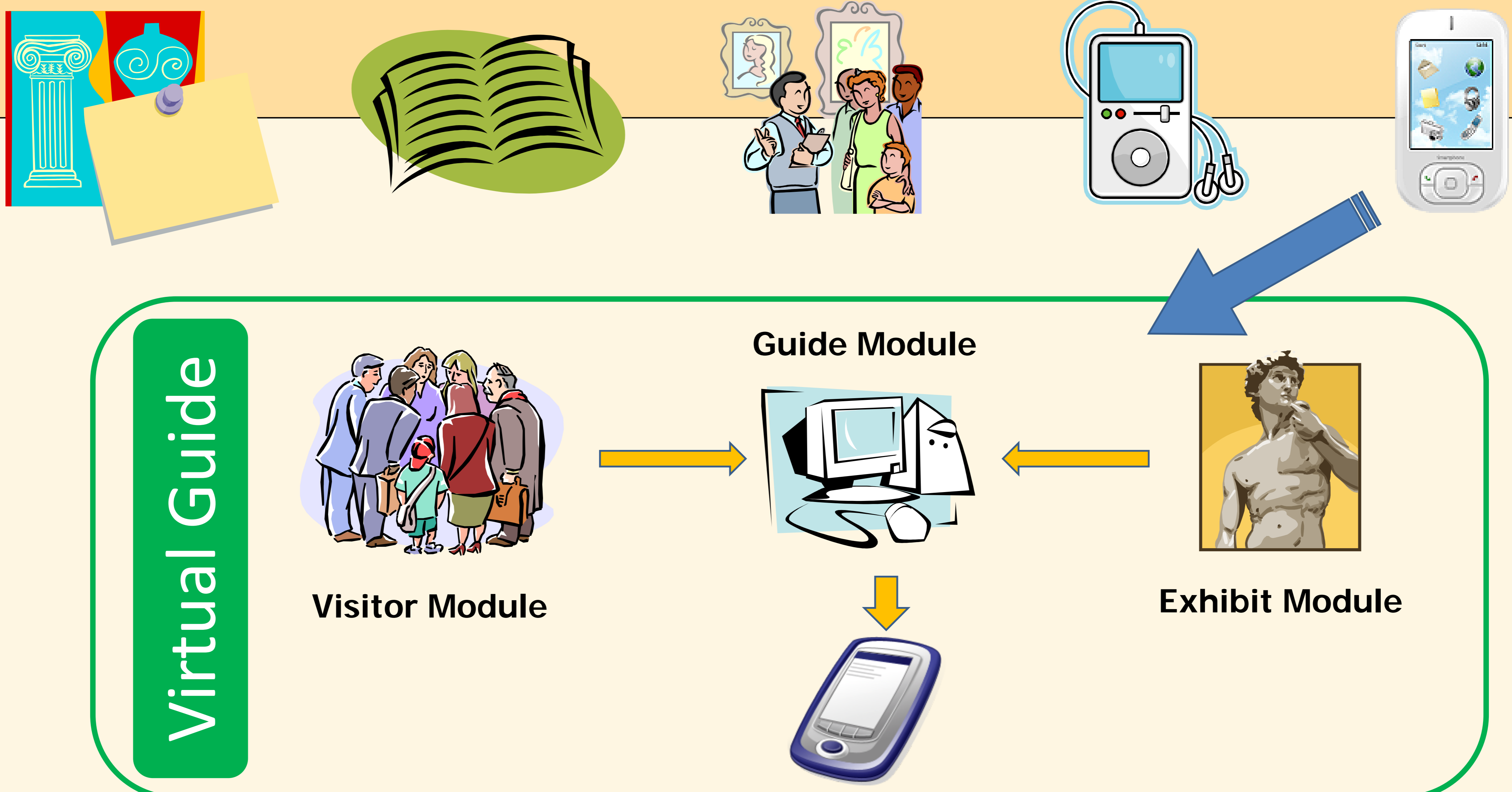## Pedagogical Faculty, Department of Information and Communication Technologies,

Personalisation on educational using of museum exposition supported by ICT

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Abstract: One of museums objectives is to extend visitors′ knowledge. As visitors come with varied and different needs and as they require specific information, an individual approach to them is vital. ICT development makes individualized museum exposition easily achievable. There are various methods and models available and they also include a virtual (adaptive) guide. This article deals with the description of a virtual guide system aimed at educational function of museum expositions. It describes its structure, function and implementation in a virtual museum context.

The educational goals can be achieved when the exposition content is presented in a form which is comprehensible and attractive for potential visitors. Wide range of visitors′ needs can be met through individualized tours.

Virtual Guide

Guide Module

Visitor Module

Exhibit Module

Stage1:
- Design of a virtual museum
- Visitors categorization
- Exhibit database
- Initial routes and supplementary neuronal network

In the first stage, the visitor can continuously adjust the individually designed route and exhibit information level and they are allowed to initiate alterations to the initial routes.
This stage's objective is to test the whole system and virtual guides basic operational principles.

Stage2:

- Design and implementation of the expert tour controlling system
- Didactic test

A didactic test done by a test group of selected primary and secondary schools students researches the potential increased educational benefits of controlled tours.

Stage3:
- Implementation in a real museum in the form of a mobile smart phone application

Visitors answer categorizing questions after activating the application in their mobile phones. Once the category they belong to has been defined, visitors will be offered a personalized tour. Information regarding the viewed exhibit will be directly displayed in their mobile phones.

Conclusion: Education is one of museums goals and an individualized approach to visitors is a way, how to meet this objective. Each visitor requires different information. ICT provides tools, which enable personalized tours. The adaptive guide represents one of such tools.
The Virtual Guide has been designed to serve this purpose. It consists of three modules: Visitor Module categorizing museum visitors, the Exhibit Module comprising the exhibits database and their characteristics and finally the Guide Module, which is a programme to select and present personalized guided exposition tours to visitors.