



Sparkling Science >

Science linking with School
School linking with Science

PROJECT OUTLOOK 19th February 2009

Applications on the Move
Development of a mobile Gaming Application
for Young People

LEADING INSTITUTION

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SCHOOL INVOLVED

HTL Villach



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Austrian Federal Ministry of
Science and Research

Application on the Move Location based games from students for students

Sparkling Science is a new funding source supported by the Austrian Federal Ministry of Science and Research to combine research and educational institutions through joint projects. The aim of the program is to create a strong linkage between research and education with the target to offer a specific source for young academics. Since 2006, the Carinthia University of Applied Sciences, Department of Geoinformation organizes GEOGAMES annually with the aim to show the application of GIS in practice in a playful way. Therefore, students should get an overview of the GIS world and further they should learn to handle Geoinformation systems (GIS) based on examples and tasks. Through the support of Location Based Games interest should arouse in handling location based data. 'Many adolescents spend too much time at home in front of their computers and do less exercise. Location Based Gaming will support and stimulate playing outside in nature again. Therefore, it is important that students are involved in the development of the play platform from the beginning on' says project manager Dr.-Ing. Karl-Heinrich Anders, professor for Geoinformatics at the Carinthia University of Applied Sciences.

For students it is a main problem to develop interesting ideas for games. Therefore, the idea was born that students should develop such location-based games. This idea is now realized through the research project *Applications on the Move*. This project, which started in December 2008, is funded for two years from the Austrian Federal Ministry of Science and Research in line with *Sparkling Science*. The background of this project is shaped through the term 'Location Based Service' which is a main focus of the Carinthia University of Applied Sciences, Department for Geoinformation as nowadays the importance of this term increases throughout. Behind 'Location Based Service' lays the reference of multilayered information based on the actual position. Known applications of 'Location Based Service' are for example navigation systems or information about the location of the nearest pharmacy or supermarket that can be accessed through a mobile phone.

For this project, the department of Geoinformation is cooperating with the 'Höhere Technische Bundes-Lehr- und Versuchsanstalt Villach' (HTL). 'The cooperation between the Carinthia University of Applied Sciences and the HTL in Villach brings only advantages as the HTL provides important input with the ideas of the students whereas the Carinthia University of Applied Sciences manages the necessary know-how for the planning and implementation based on the technical expertise' says DI (FH) Christoph Erlacher Msc, research assistant in the department of Geoinformation.



Aims and Status

Also the scholars and teachers are motivated by the project:

- "We are excited about the experiences which we will get from the teamwork in a larger project", appreciates Franca-Sofia Fehrenbach, scholar at HTL.
- "The project cooperation with the FH is an advantage for us on future job applications", says Oliver Türk, scholar at HTL.
- "We expect to get more project experience from this cooperation to develop software for mobile clients with GPS" means Kurt Enzi, scholar at HTL.
- "This cooperation is a great opportunity to show, how much economy and research regards the practice oriented training of our pupils. The instruction of commercial, general education and technical subjects by committed teachers with motivated pupils offers a huge synergy potential." [Prof.Dr. Karl-Heinz Eder, HTL]


The main aim of 'Applications on The Move' is the development of a modular, generic Location Based Service application which should form the basis for future applications.

- Expanding the prototype with the aim to organize regional, national and international school championships in the field of Location Based Gaming
- Strengthening the know how transfer from Universities to Senior High Schools
- Increasing the awareness for the occupational area of Geoinformation
- Building the know how to integrate students in the research process
- Further developments of the didactic concept of problem and project based education

Students from the HTL have the opportunities to work on current research topics such as location based service which have started already. Six ideas for games were developed already by the HTL and these ideas were presented within a workshop on the 19th December 2008 at the Carinthia University of Applied Sciences. Currently the students are in the stage of implementing the first prototype which will be presented at the GEOGAMES 2009.

More information to the project can be found under
http://www.fh-kaernten.at/cms/stg-geo/geo_fue_3856.htm
and the project wiki site is
www.fh-kaernten.at/geo/sparkling





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