

The Academic Conference Knowledge Enabler (TACKLE)

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1. *The Idea:*

Each year, members of the world's academic community (professors, researchers, students) attend academic conferences in various diverse disciplines, which are hosted in an equally diverse set of locations. Such participation involves a significant amount of logistical information-gathering, mainly depending on where the conference is held. Issues like means of travel and boarding of are foremost importance. Also, participants are interested in details such as weather conditions in that region, places of tourist value, and so on.

Our mashup “**The Academic Conference Knowledge Enabler**” (*TACKLE*) aims to serve such an academic audience, by conflating segments ranging from ticket and travel planning aids to current weather to hotel and food facilities in the region. The mashup also shows at a glance, a geographically organized display of conferences scheduled in the immediate future.

2. *The Functionality:*

The *TACKLE* mashup provides the following functional items:

- Ability to view upcoming conferences in a given month (currently, all conferences listed in the ACM calendar are displayed) by region
- Ability to view conferences by selected month
- Search by keywords to enable searching by Conference Name or Location
- Obtaining the following information about a certain conference location:
 - Search for Flights from your location to the conference venue for the dates of the conference (both Round-Trip and One-Way)
 - Search for Hotels options at the venues
 - Current weather indicators for the location
 - Top Google search results from Maps, Web, Video, and Blogs to help obtain immediate context
 - Links to most likely information keywords for the location, such as searching for Shopping, Tourist attractions etc. are provided

3. *The Marketability*

• *Target Audience*

The average number of participants in a large-scale conference is usually in the hundreds, of which a sizeable chunk comes from outside the region or even outside the country in which the event is being held. These researchers and students will form a natural audience for such a mashup. Participants face several issues planning logistical issues for a trip to a conference, and resolving these issues becomes cumbersome due to lack of consolidated and valuable information. This is precisely the gap that we aim to fill.

• *Ad-based Marketing*

The introduction of relevant text-based advertisements will make supporting such a mashup a viable option for the hosting service.

4. *The Design and APIs*

The following APIs were used:

- Google Maps: to obtain geographical visualizations
- Yahoo Farechase: to obtain Hotel and Flight fares
- Weather Bug: to obtain current weather information
- Google Search API: quick and pre-formed search links
- ACM events calendar: this provides a list of various upcoming academic conferences
- Google Geocoder: to obtain geographical coordinates of a specific location

5. *Design:*

At the heart of the mashup is the ability to extract academic conferences information from the ACM events calendar (<http://campus.acm.org/calendar/>). This calendar is published as an html page, but in a fairly well-defined structure, which enables us to extract relevant information such as conference titles, dates, and locations. A script downloads this ACM events calendar at regular intervals (1 day), parses it and updates a database and some XML files that contain this extracted information.

Then, by using the *Google Maps API*, we embed maps in our mashup. Maps can be browsed by location. The *Google Geocoder API* is used to obtain the geographical coordinates (latitude and longitude) for each conference location. Bubble markers are placed on the maps to indicate the locations. Hovering over such a marker brings up an information bubble which contains the following:

- Conference Title
- Conference Location and a link to it
- Conference Dates
- A link to the conference website

Clicking on the Conference Location brings up a location-specific page. This page is another sub-mashup. Useful information pertaining to that location is displayed. *Yahoo Farechase API* is used to help user find best deals for hotels near conference location. This also provides information on flights to the conference city from a given source (home) town for the conference dates. These fields can be adjusted by the user.

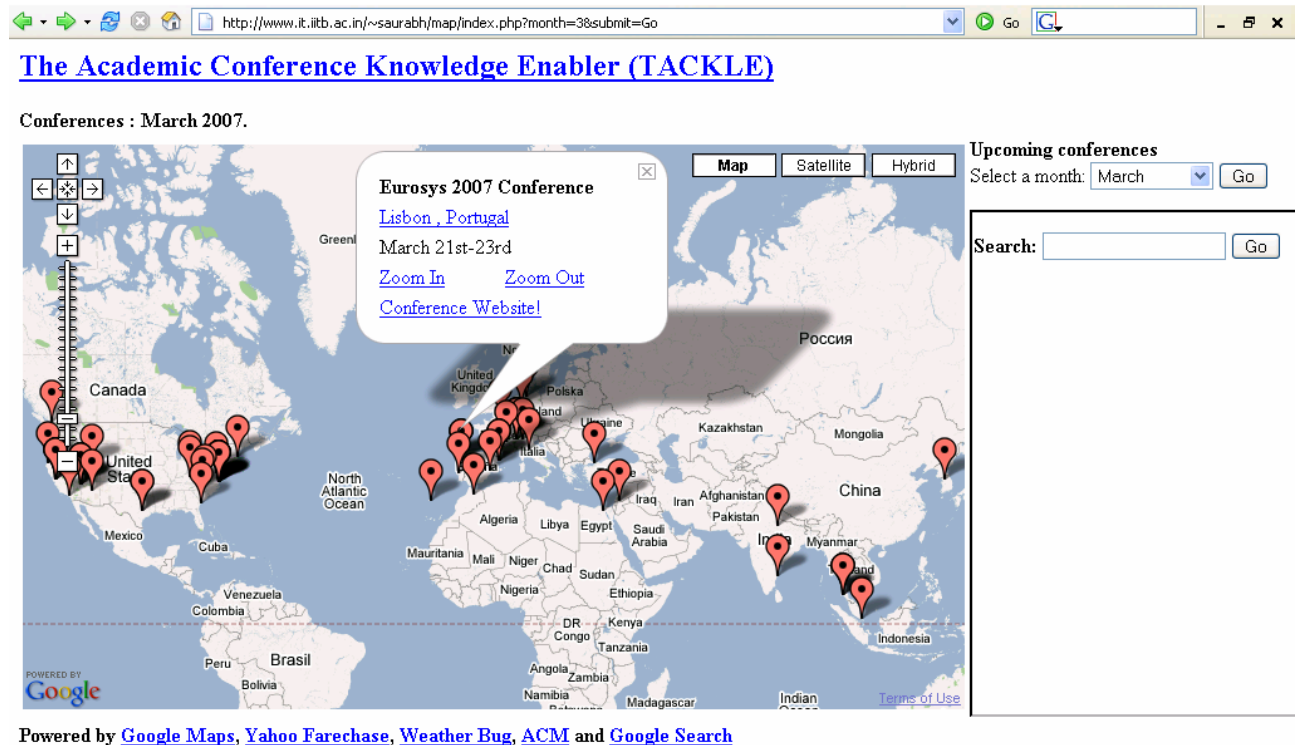
The *Weather Bug API* publishes the *Live Weather* for a location in RSS format for a given latitude and longitude. Again, using Google's Geocoding API, we find the coordinates of a location and supply it to *weatherbug.com* and obtain the RSS feed file corresponding to it. The RSS is then parsed to get the weather conditions and is published as part of the mashup.

Using *Google's Search API*, we also provide results specific to the conference location which include results for Local, Web, Video as well as Blogs. The Search module looks up conference names and locations in the database and return query results for these categories to the user. A search box is also available to search by conference name or location.

Demo URL: <http://www.it.iitb.ac.in/~saurabh/map>

Key Screen Shots

1. Homepage



http://www.it.itb.ac.in/~saurabh/map/index.php?month=3&submit=Go

The Academic Conference Knowledge Enabler (TACKLE)

Conferences : March 2007.

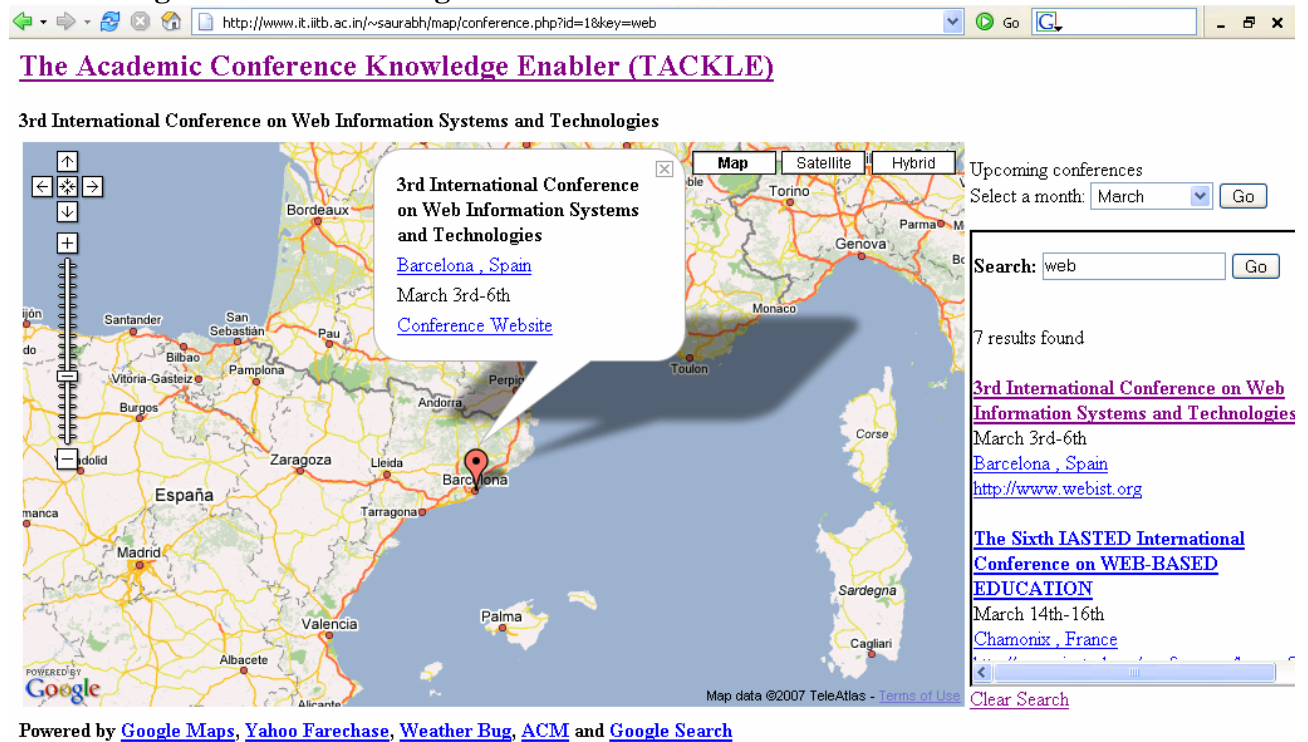
Upcoming conferences
Select a month:

Search:

Powered by [Google Maps](#), [Yahoo Farechase](#), [Weather Bug](#), [ACM](#) and [Google Search](#)

The screenshot shows a world map with numerous red location pins. A callout box for the 'Eurosys 2007 Conference' is visible, listing the location as Lisbon, Portugal, dates as March 21st-23rd, and providing links for 'Zoom In', 'Zoom Out', and 'Conference Website!'. The map interface includes navigation controls and map style options (Map, Satellite, Hybrid). The sidebar on the right contains a search bar and a dropdown menu for selecting a month.

2. Locating a conference through search



http://www.it.itb.ac.in/~saurabh/map/conference.php?id=1&key=web

The Academic Conference Knowledge Enabler (TACKLE)

3rd International Conference on Web Information Systems and Technologies

Upcoming conferences
Select a month:

Search:

7 results found

- [3rd International Conference on Web Information Systems and Technologies](#)
March 3rd-6th
[Barcelona , Spain](#)
[Conference Website](#)
- [The Sixth IASTED International Conference on WEB-BASED EDUCATION](#)
March 14th-16th
[Chamonix , France](#)

Powered by [Google Maps](#), [Yahoo Farechase](#), [Weather Bug](#), [ACM](#) and [Google Search](#)

The screenshot shows a zoomed-in map of Barcelona, Spain, with a callout box for the '3rd International Conference on Web Information Systems and Technologies'. The callout box lists the location as Barcelona, Spain, dates as March 3rd-6th, and provides a link for 'Conference Website'. The search sidebar on the right shows the search term 'web' and lists 7 results, with the top two results visible. The map interface includes navigation controls and map style options (Map, Satellite, Hybrid).

3. Conference location information



The Academic Conference Knowledge Enabler (TACKLE)

3rd International Conference on Web Information Systems and Technologies, Barcelona , Spain (March 3rd-6th)

Powered by **YAHOO!** FARECHASE

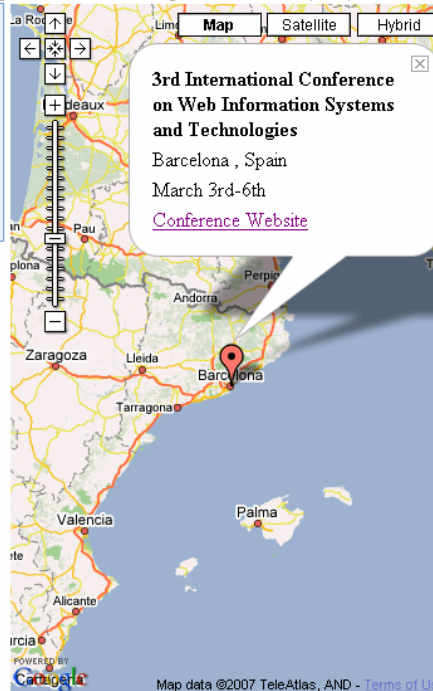
Search dozens of sites for... [Flights](#) | [Hotels](#)

From: To:

Depart: Return:

Passengers:

[Round-Trip](#) | [One-Way](#)



Search Google for **Barcelona , Spain**: [Dining guides](#) [Attractions](#) [Suggested itineraries](#) [Lodging guides](#) [Shopping](#) [Tours & day trips](#) [Getting around](#) [Nightlife](#)

powered by **Google™**

Local

[Barcelona](#)

Barcelona
Spain
[directions](#)

Web

[Barcelona Travel Guide, Catalonia, Spain](#)
Tourist guide to **Barcelona**, Catalonia and Costa Brava.
www.aboutbarcelona.com

Video

[Children Of Bodom - Live In Barcelona, Spain 2003 part Jul 16, 2006](#)
video.google.com

Blog

[back to barcelona - Barcelona, Spain](#)
Mar 10, 2007
Barcelona, Spain How could I not go back to a city I loved so much? Especially when the sun is shining and it's nearing summer. Long weekend and a trip back to the Catalan province with the girls from San Diego: Sarah, Perla, Kelly, ...
<http://www.travelpod.com>

Live Weather Conditions for Barcelona , Spain



Mostly Sunny

Temperature: 17.0 °C
Humidity: 17% Wind Speed: 20 km NE
Pressure: 1025.06 mbar
Dew Point: -8 °C Gusts: km NNE Rain
Today: 0.0 mm

Powered by [Google Maps](#), [Yahoo Farechase](#), [Weather Bug](#), [ACM](#) and [Google Search](#)