

Mashups and Mobile Solutions

Code challenge contest expands

By Matthew DeMeritt, ESRI Writer

This year developers could impress and inform their peers and compete for cash prizes by submitting original code samples in not one, but two, contests.

The ArcGIS Code Challenge has been part of the ESRI Developer Summit since the conference began in 2006. This year's contest was split into the ArcGIS Server Mashup Code Challenge (using the ArcGIS Server APIs) and the ArcGIS Mobile Code Challenge (using the ArcGIS Mobile Software Development Kit [SDK]) to better represent the multiple development environments available to developers on the ArcGIS platform.

The ESRI developer community—ESRI DeveloperNetwork (EDN) subscribers, business partners, and selected current and past attendees of the Developer Summit—selected the two winners for each contest from a total of more than 30 entries. The winners were announced at the 2009 ESRI Developer Summit.

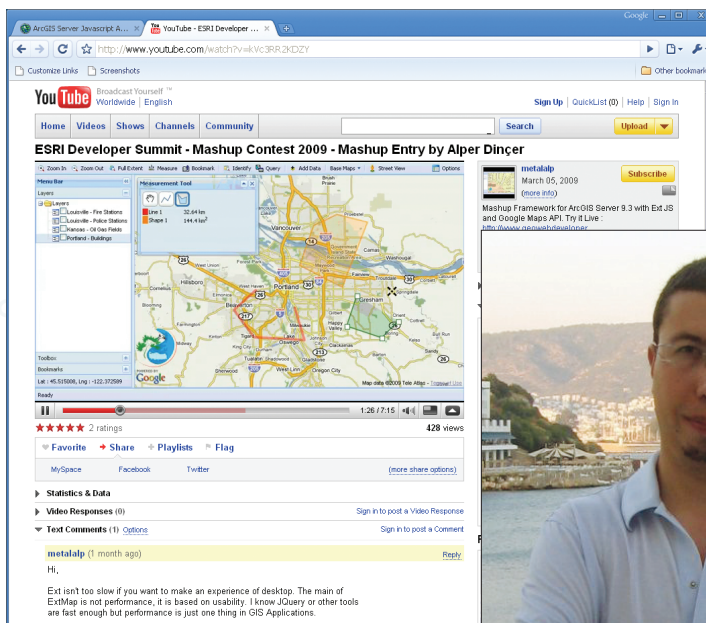
ArcGIS Server Mashup Code Challenge

Alper Dincer, a Web developer at the Ministry of Environment and Forestry in Ankara, Turkey, won first place and the \$7,000 award for his entry, Summit ExtMap—Mashup Framework. His application is a mashup framework based on Ext JS Framework, Google Maps API, and the ArcGIS API for JavaScript Extension to the Google Maps API.

With this application, users can add and remove layers supplied by ArcGIS Online and select basemaps from Google and Microsoft Virtual Earth. The application's well-designed user interface offers tools that perform geocoding and reverse geocoding, find altitude by clicking on the map, add data/services, query layers by attributes, and configure map settings.

"The main goal of our mashup is usability rather than performance, and the inspiration point was ArcGIS Desktop ArcView," says Dincer. "We wanted to make a primitive Web version of ArcView. I hope both developers and users download the source code, use it in their projects, and share their ideas about it with us."

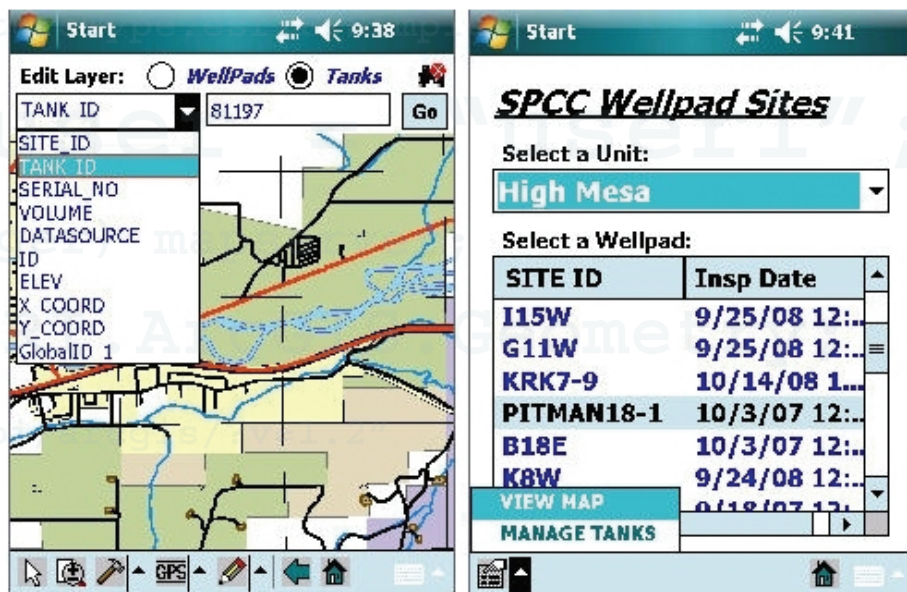
Matthew Petre, a software developer at Petris Technology in Houston, Texas, won the second prize and \$3,000 for his Flex Viewer Dice Job Searcher Widget. He created this application in eight hours using the ArcGIS API for Flex. It allows users to search for job postings using



See Alper Dincer's first place ArcGIS Server Mashup Code Challenge entry, Summit ExtMap—Mashup Framework, in action on YouTube (www.youtube.com/watch?v=kVc3RR2KDZY).



Matthew Petre, a software developer at Petris Technology in Houston, Texas, won second place in the ArcGIS Server Mashup Code Challenge.



Lisa Tunnel's Environmental Compliance Field application can be used to perform inspections for environmental compliance for mining, oil, and gas sites.



Lisa Tunnel won first place in the ArcGIS Mobile Code Challenge.

Dice and visualize this information on ArcGIS Online basemaps.

"I was eager to work with the ArcGIS Flex API [so] the code challenge was a perfect excuse to try some creative things with Adobe Flex and the ArcGIS API for Flex," said Petre. "I believe I created an application that showcases the power of Flex, the performance of the ArcGIS API for Flex, and ease of development for both. We are now evaluating the ArcGIS APIs for

JavaScript, Flex, and Silverlight as possible solutions to create richer user experiences for future [product] releases."

ArcGIS Mobile Code Challenge

Lisa Tunnel, software developer at Digital Cartographic Services in Denver, Colorado, won first place in the ArcGIS Mobile Code Challenge for her Environmental Compliance Field application and received the \$4,000 prize.

"My organization entered the ArcGIS Mobile Code Challenge because we felt it would be an opportunity to showcase some of the mobile tools we've developed using ArcGIS Mobile 9.3," said Tunnel. "The code challenge is a great idea because it allows the mobile developer community to see what others are implementing and how it can be accomplished."

Tunnel's application can be used to perform inspections for environmental compliance for mining, oil, and gas sites. Users can turn layers on and off; select which layer to edit; sketch geometry; walk (GPS) geometry; search a layer based on attributes; select a feature to delete or modify; and pan, zoom, and identify.

Chad Yoder, software developer at GeoCove in Orlando, Florida, received the \$2,000 second place award for his ArcGIS Mobile Backup and Restore Utility.

"We found a serious need for all mobile application users to be able to recover their

work, should something happen to their original cache," said Yoder. "There are no out-of-the-box tools for data recovery from an unsyncable cache, so we built one and decided to share it with the developer community via the code challenge. I think the code challenge is a great way to inspire developers to share their ideas and tools."

Better Tools for Developers

ESRI's ArcGIS platform continues to evolve and provide the APIs and tools to build next-generation GIS Web and mobile applications that are specifically designed for different deployment scenarios.

The ArcGIS Code Challenge illustrated the technological leaps made since last year's Developer Summit. With the beta release of the ArcGIS API for Microsoft Silverlight, the developer community will continue to produce many GIS applications with compelling graphics, tighter data integration, and streaming audio and video.

"It's inspiring to see so many creative and useful applications come from the challenge," said Jim Barry, program manager of the ESRI Developer Network (EDN). "The code challenges are a great way to incentivize developers to share tools, ideas, creativity, and code with the community. Over the past year, there has been an increase in the exchange of code among our community, and we encourage developers to continue this trend."



Chad Yoder took second place in the ArcGIS Mobile Code Challenge with the ArcGIS Mobile Backup and Restore Utility. It provides a way to export and import changes from an ArcGIS Mobile map cache.