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Brac boys take PC games to new height

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A team of three students from Brac University has developed a massively multi-player online (MMO) game for PCs that can be played by body movements and voice command. They claim that this is the first ever such MMO PC game in the world.

MMO is an internet multiplayer video game which is capable of supporting hundreds or thousands of players simultaneously.



The Trio: Risul Karim demonstrates game controls, from inset left: Kamran Walilullah and Imran Farid

The members - Risul Karim, Imran Farid and Kamran Walilullah- are all doing their 9th semester in Computer Science and Engineering (CSE) Department.

Although they did not finalise any name for the game, they call it Aerial Multi-Player Dogfight.

In a demonstration Karim showed how a plane in the game can be controlled through hand gesture and voice command using a webcam and microphone. You can see the demo at <http://www.pixelizard.com/projectcsr/>

The game is built on Java ME 3 engine and they customised the engine to integrate the web cam and microphone.

He also said its voice command input is generic which means it takes command from both male and female.

The team now is working on to make a gaming server. After that they will make the game available for all. Karim hoped they would be able to launch it within two to three months.

Like other online multi-player games, gamers will be able to download them for free, however, for updates of the game there will be small online charges. Different other apps using this scheme will also be available online with small download charges.

“Anyone can play the game with Windows XP or later, a moderate graphics card, 2GB or 4GB RAM and of course web cam and microphone”, said Karim. He prefers a bit high quality web cam for smooth gaming experience.

Their game will also run on any operating systems such as Mac or Linux.

They started to develop the game 5-6 months back as an undergraduate thesis project. Karim said while developing it, they were thinking how to make it different from other MMO games.

“After doing a lot of online research, we found no MMO games that take both voice command and body movement instructions together”, said Karim.

He also said that although there are MMO games for gaming consoles (XBox- Kinect, PS3 MOVE) using body movements, there are no such games for PCs. Moreover, consoles and the games are expensive for lot of gamers, whereas, their game can be played on any PC with moderate configuration.

Then they came up with the idea of making a PC game that will take command from voice and body movements.

Waliullah did image processing, games and network coding and graphics, Farid did sound, graphics and game coding, and voice processing, graphics and game coding were done by Karim.

Supervised by Dr Mumit Khan, chairperson, CSE department, Brac University, the project won them 1st prize of National Innovative Project Competition (NIPC 2012), which was held at Independent University of Bangladesh (IUB) on March 15.

Karim said their concept can be applied to many other areas. He said they have plans to develop 'Battle Simulator' for defence and therapy for autistic children with this module.

They are applying this gaming module to make a robot. Karim said the robot will be able to take command from voice and body gesture to execute the tasks given to him. They are already halfway through with the project.