

Welcome yet again to The Game Creators' newsletter. As the months roll by and we head towards the much anticipated release of FPSXC X10 there are more exclusive revelations, including new character abilities and game-winning functions. This issue also highlights a number of commercial releases, FPSXC being used as a training tool, and more tips and advice to hone your skills.

This is the last newsletter you will - or perhaps will not - receive using the [RollingSound](#) (9) [DBPro](#) (3) [Convention](#) (4) [Tyring Tutor](#) (5) [3D Linters](#) (6) [Offers](#) (7) [FPSX News](#) (8) [DarkBASIC Professional](#) (10) [Lee's Tip of the Month](#) (11) [PlayBASIC](#) (12) [From the Forums](#) (13) [Winner](#) (14) [Outro](#)

At home, I'm constantly accused of hoarding valuable items. These items are often referred to as rubbish by others, but to me they are valuable. My conviction for keeping these things is that one day - they will "come in useful". Being born and bred in Yorkshire, I also like to keep a keen eye on my finances, and get value for money from everything.

The digital age is somewhat of a godsend for me; now I can collect all sorts of virtual things in a very small physical space. Over the last few years, especially since broadband appeared, this has been the time of collecting applications, models, textures and many different utilities. Sometimes, they are frankly useless at the time I download them. Later, however, I reap the rewards of my hoarding habits. In amongst my collection of freebies that include Poser, Cinema 4D, Bryce, abandonware, professional photos and high-resolution textures, I can find 90% of what I need for any project.

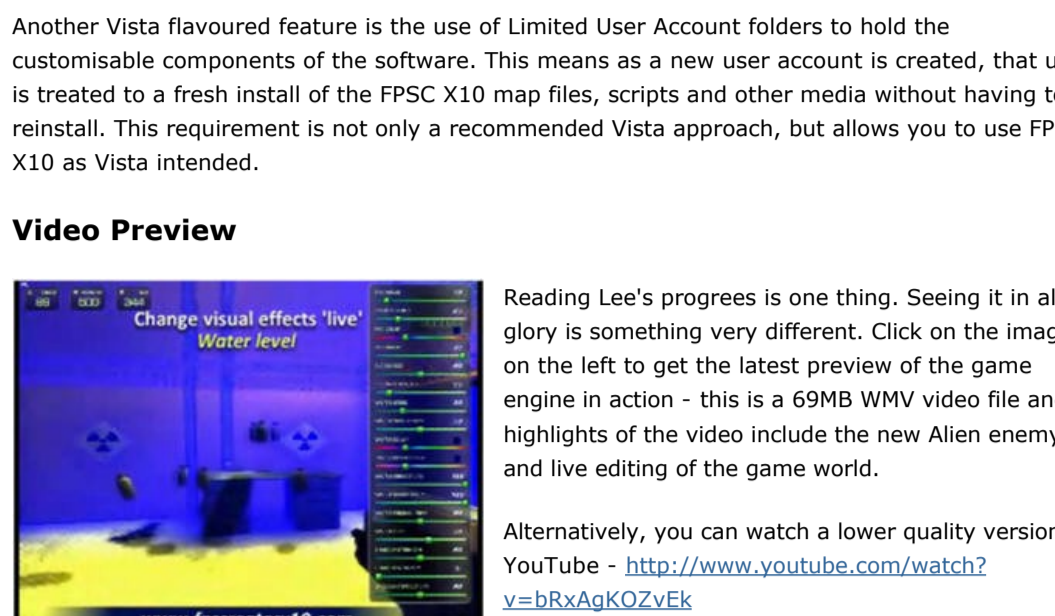
So my advice for you this month is this: no matter how obscure something may seem at the time, no matter how busy you convince yourself you are, no matter what your reasons are for not doing it, change your ways. If there are resources freely available, take them now, and work out what you are going to do with them later. You never know, they may even inspire you to do something different to incorporate them!

Until next time,
Steve Vozak

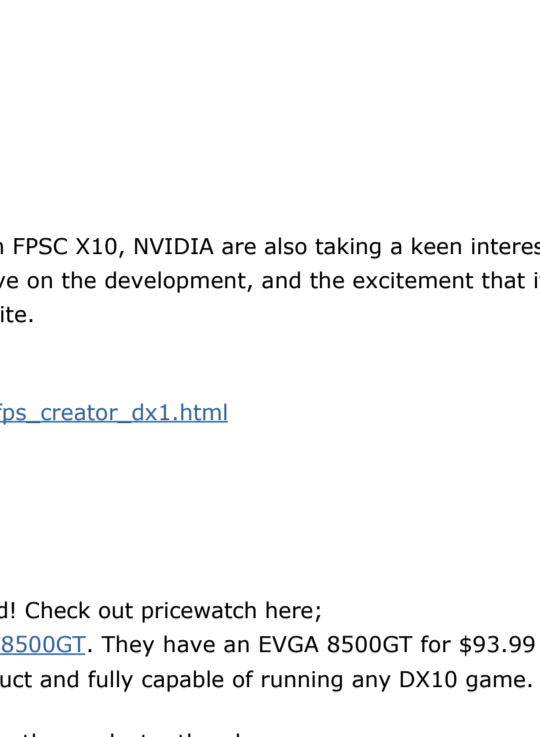
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FPS Creator X10 Update



One of the most anticipated improvements of X10 is quite naturally the graphics; it's the first thing you experience, and first impressions last a long time. The image you see here is a preview of the new X10 Alien character called "Magnason", and as you can see he's an impressive beast. As ugly as he is, you can only admire his polygonal beauty, and shader-enhanced vein-popping, oily skin!



The beta is starting to take shape with a complete installer, serial code system, near-final artwork, finalised DirectX 10 functionality and above all, a well-performing application. Testing has been paramount, and in doing so a number of crucial areas were found that we felt could be improved before release.

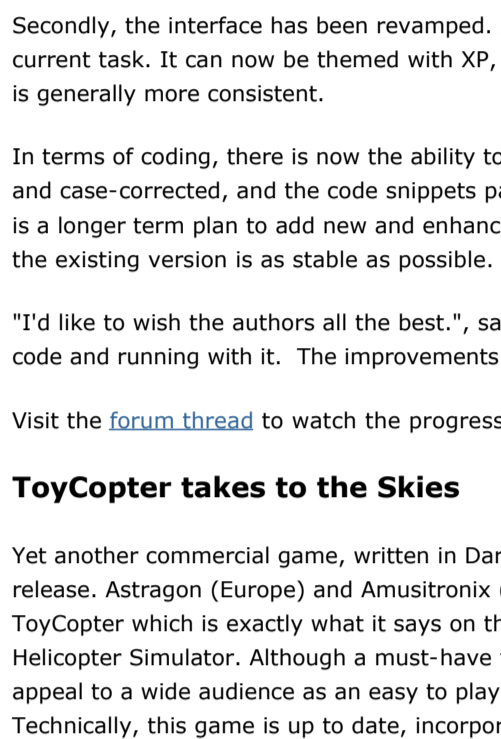
One of these improvements is the addition of swimming, now embedded in the game engine. As the scene is filled - or is filling - with water, the player can swim up and down, adding a new dimension to the already numerous possibilities for FPSXC X10 games.

Another feature is the inclusion of video capture built into the engine itself. This means you can play a section of your game, capture the footage to a video file, and ultimately upload it to a website to show your friends, or advertise your game. You can also use the video in the editing of the level itself, by using a Story Zone marker to play the video back when the player enters a room or triggers an event.

You will be pleased to know the whole FPSXC X10 game is a pure DirectX 10 application, along with the capture code which is designed with Vista in mind.

Another Vista flavoured feature is the use of Limited User Account folders to hold the customisable components of the software. This means as a new user account is created, that user is treated to a fresh install of the FPSXC X10 map files, scripts and other media without having to reinstall. This requirement is not a recommended Vista approach, but allows you to use FPSXC X10 as Vista intended.

Video Preview



Reading Lee's progress is one thing. Seeing it in all its glory is something very different. Click on the image on the left for the latest preview of the engine in action - this is a 60MB WMV video file and highlights of the video include the new Alien enemy and live editing of the game world.

Alternatively, you can watch a lower quality version on YouTube - <http://www.youtube.com/watch?v=BR8AqK0ZvE8>

NVIDIA Reporting

In addition to the information you find here on FPSXC X10, NVIDIA are also taking a keen interest in the product. To get an independent perspective on the development, and the excitement that it is generating, take a look at the blogs on their site.

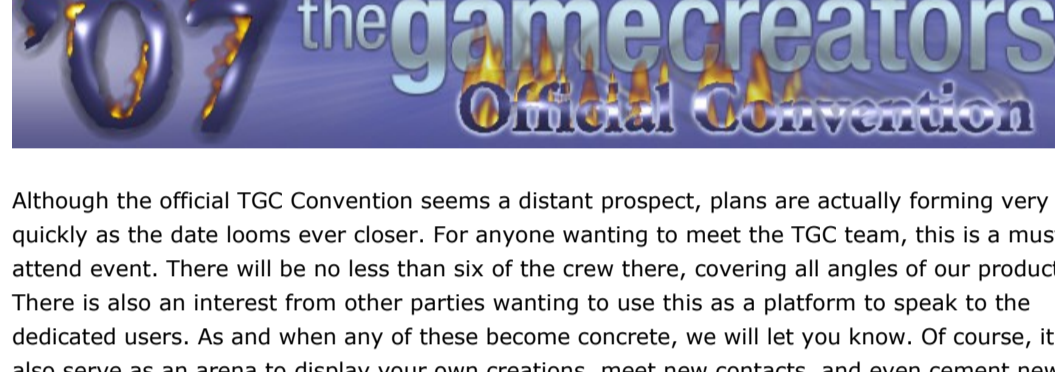
The current blog entry can be found here - http://blogs.nvidia.com/developers/2007/04/fps_creator_dx10.html

DX10 Cards for less than \$99

The price of DX10 gaming has already tumbled! Check out pricewatch here; <http://castle.pricewatch.com/s/search.asp?c=8500GT>. They have an EVGA 8500GT for \$93.99 for the GeForce 8500GT. This is a full DX10 product and fully capable of running any DX10 game.

There is a review of a 8500GT [here](#) which gives the product a thumbs up.

DarkBASIC Professional Round-up



DBPro and Windows Vista

The support team are receiving a number of questions regarding the compatibility of DarkBASIC Professional and Vista. Technically, the question is about the compatibility of DirectX, this is the key component that will affect the operation of your compiled games on a given platform. There are two approaches to ensure the smooth running of your software, the following instructions assume you have installed and activated DarkBASIC Professional first:

- Click on Start > All Programs > The Game Creators
- Right Click on DarkBASIC Professional and select Properties from the menu.
- Click on Advanced.
- Place a Tick in Run as Administrator.
- Click OK.
- Click OK again.

If you experience additional problems with DarkBASIC Professional running under Windows Vista, please update your display drivers, and try again. If problems still persist, please complete the following instructions:

- Click on Start > All Programs > The Game Creators
- Right Click on DarkBASIC Professional and select Properties from the menu.
- Click on the Compatibility Tab
- Place a tick in "Run program in compatibility mode for:"
- Select Windows XP SP2 from drop down Box.
- Place a tick in Disable visual themes.
- Place a tick in Disable desktop composition.
- Click OK

These methods have been tested and found to produce a successful solution to the small numbers of problems reported.

Blue IDE gets a new lease of life

For many years, Robert Knight's Blue IDE has been the editor of choice for many DB Pro coders. Being open source, there have been a few minor updates from time to time. Now, thanks to Alberts Bujunovs (aka Olby) and a number of other contributors, a more comprehensive update is under way.

Firstly, many minor bugs have been removed, including help file availability and visibility, project organiser display and other small tweaks.

Secondly, the interface has been revamped. It is more intuitive, and can be resized to suit the current task. It can now be themed with XP, more shortcuts have been added, and the appearance is generally more consistent.

In terms of coding, there is now the ability to explicitly declare variables, functions are recognised and code corrected, and the code snippets panel has been populated with additional entries. There is a longer term plan to add new and enhanced functionality, but this has sensibly been left until the existing version is as stable as possible.

"I'd like to wish the authors all the best.", says Rob Knight, "I am glad to see others picking up the code and running with it. The improvements made here are impressive."

Visit the [forum thread](#) to watch the progress.

ToyCopter takes to the Skies

Yet another commercial game, written in DarkBASIC Professional, is set for release. Astragon (Europe) and Amritsonix (US) will be publishing ToyCopter which is exactly what it says on the label - a Radio Controlled Helicopter Simulator. Although a must-have for RC enthusiasts, it will appeal to a wide audience as an easy to play, but hard to master game.

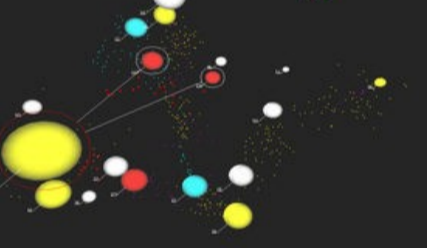


The game plays in Free Flight mode to help you master the controls, before progressing to the Mission mode. Here, you will be expected to carry out various tasks, including putting balls on the programme, and hovering around obstacles. Also included is a room and mission editor to create your own challenges.

More details can be found at <http://www.toycopter.com>

Enhanced Animation 1.2

Enhanced Animation has been updated to version 1.2 in order to correct a few issues that have been recognised:



- EnAn_ObjRenameLimb has been fixed
- Changed oac return values to include transition information
- Changed scale output to be scaled by 100. This now reflects the same units as DBPro.
- When cloning oac objects, the new oac now copies the base oac's active limbs.
- Fixed a problem with erratic behaviour when transitions are constantly applied to an object.

A by-product is the ability to perform some new, useful activities. The update to the transition information means you can now make another model perfectly follow an EnAn animated model by using the ROTATE LIMB, OFFSET LIMB, and SCALE LIMB commands. This is a very good way to handle things in a multiplayer environment.

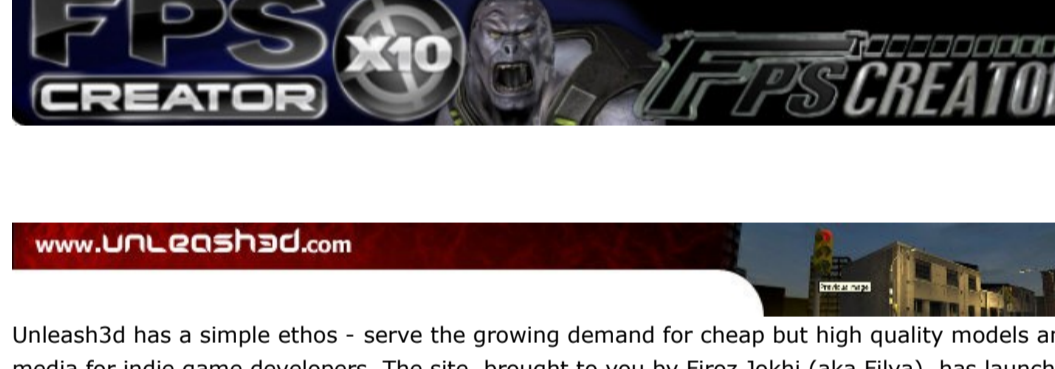
You can download the update from your order history.

Synergy Editor

Synergy IDE developer John Youren has released Synergy Editor for beta-testing. This is a lightweight editor, ideal for fast development and prototyping. When the trials and comforts of a fully fledged development environment are not necessary, this may be just the tool you need.

More details can be found on the forum - http://forum.thegamecreators.com/?m=2m-forum_view&t=105348&b=20

TGC Official Convention 2007



Although the official TGC Convention seems a distant prospect, plans are actually forming very quickly as the date looms ever closer. For anyone wanting to meet the TGC team, this is a must-attend event. There will be no less than six of the crew there, covering all angles of our products. There is also an interest from other parties wanting to use this as a platform to speak to the attendees. As and when any of these become concrete, we will let you know. Of course, it will also serve as an arena to display your own creations, meet new contacts, and even cement new relationships with people who could help you realise your dreams.

Numbers are limited, and so we urge you to book early, particularly if you want to take advantage of the on-site accommodation. The ongoing discussions can be found on the forum [here](#), and the booking form can also be downloaded [here](#).

Teaching-you Typing Tutor 2 Released!

This month sees the release of another commercial title, developed in DarkBASIC Professional. Some of you may already be familiar with the product, Teach-yourself Typing Tutor 2, the name of which has appeared on the forums some time ago.



TYT2 has been developed by a team that has involved no less than 10 members of our main community, who have produced games that have been included in the final package. The programmers were chosen through a competition early last year, in which the best ideas were taken on board and developed alongside the main product.

The lead programmer, Kes James, has brought the final product to the marketable stage. He has worked for over a year on this project, and began by road-testing all of the code against the products and ensuring that TYT2 contained best-of-breed functionality from all of them. The starting point was the original product, and the goal was to create an up-to-date program able to compete with the best of the market competition.

There have been many challenges along the way. The most obvious requirement has been to bring the interface up to current day graphic standards. The original TYT stood the test of time in terms of success, but definitely had a distinct "Windows 95" feel to it. The updated navigation in TYT2 has also been oriented towards activities, including a Lessons Room, Practice Room, Help Centre and Reference Library.

One unexpected challenge did not surface until well into the project lifecycle. The market took a sharp downturn into a flood of hardware budget hits, and two versions of TYT2 were developed. There is now a Full version, and a Lite version which contains a subset of the lessons, practice documents and games.

Another hurdle was that of the integration of ten games from ten different developers. Naturally, each game has its own set of coding, which even the best of frameworks cannot handle. TYT2 is a complete game, and is necessary to select the necessary files, and used different DBPro compilers and DLL plugins, we decided to run them from TYT2 as standalone executables that immediately return to the tutorial, we programed to run them from



Click for larger preview images

The trickiest coding problem encountered during development was in the typing lessons themselves. The lesson-based code had to perform very fast to keep up with speedy touch typists and yet catch up with the slower, less experienced typists. The result was a complex set of keyboard keys and arrow keys. Kes upgraded and redesigned this code six times or more. In the end he separated key-command code, key-pressed code and key-processing code completely, ensuring each component performed up to and beyond the required speed and accuracy.

Testing is an important part of any project lifecycle. In TYT22 this took four months, utilising professional testers from the Focus Multimedia team as well as family and friends. This has resulted in a finished application that is fine-tuned, bug-free and compatible with Windows Vista.

Kes, through experience, has a little advice for anyone considering a project of any size: "You can't do everything yourself and expect to achieve top results in every area. The best way is to work as one member in a team of professionals. If you get a good team of skilled eyes, ears, minds and hands working around you on the product, you can expect a good quality all-round product at the end of the day"

Another Perspective

"It is quite an experience to develop something to someone else's requirements", says Andrew Vanbeck, programmer of Typing Pool, one of the ten included games. He thoroughly enjoyed the additional challenges involved with writing for a bigger project, pointing out that it removes any lazy traits you may have when simply working for your own needs. "The prospect of having your work catch the attention of a wider audience is an amazing fuel, which independent developers such as myself are up against and their range in ability, alongside the cleverly crafted driving system that forces you to drift around the corners of the track. It reminds me very much of the old Commodore games of the mid-80s, which in itself is a testament to the power of DarkBASIC Professional and what can be achieved with a limited amount of code."

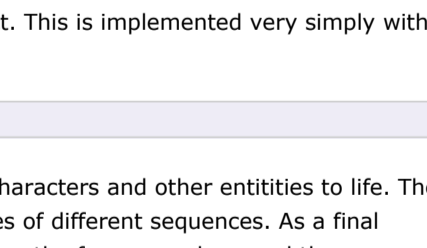
Teach Yourself Typing Version 2 is available now from [Focus Multimedia](#)

50 Line Challenge Winners

In issue 50, we set a challenge that adhered to the long-running 20 line challenge, but with a little more room for creativity. We appreciate all of the entries, it's great to see how you can see beyond the limitations and find alternative ways to solve. There were three entries that particularly stood out, and each has been rewarded with a \$100 voucher to spend on the TGC site. Can the winners please contact us to claim their prize. Here are the games:

3rd Place - Empire of the Far Suns by TBOL

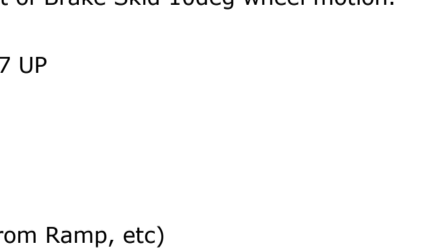
This game is based on the resource management genre. You must carefully plan your allocation of resources in order to expand your empire across the universe. The aim is to build a fully fledged empire on the planet Yodum because of it's clever implementation of what appears to be a complex manager structure in such a small game. In addition, there is sufficient AI to provide a competitive opponent. Anyone considering a management sim would be advised to observe how a simple system can yield great results.



http://forum.thegamecreators.com/?m=2m-forum_view&t=102415&b=11

2nd Place - Formula 50 Grand-Prix by Ric

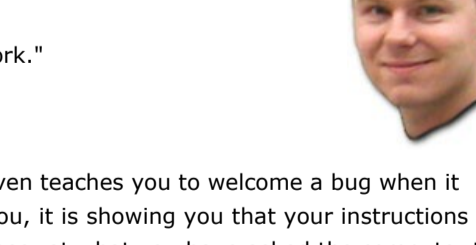
Again, this game packs in some nice functionality given the tight remit. It's a simple top-down racing game, where you must beat several opponents around the track in a 5-lap race. The main attraction of this game comes from the 5 vehicles you are up against and their range in ability, alongside the cleverly crafted driving system that forces you to drift around the corners of the track. It reminds me very much of the old Commodore games of the mid-80s, which in itself is a testament to the power of DarkBASIC Professional and what can be achieved with a limited amount of code.



http://forum.thegamecreators.com/?m=2m-forum_view&t=103042&b=11

1st Place - 3D Space Conquest by Azrael

Some games have the ability to draw you in and leave you wanting to better your personal high score. This is one of those games. Whilst attempting to colonise a series of planets, on the basis of "largest population wins", several other alien races are attempting to do exactly the same. It's nicely illustrated using some simple but effective particle effects, and is effectively rounded off with the ability to change the skill and size of the game.



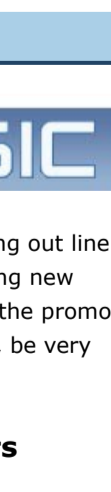
http://forum.thegamecreators.com/?m=2m-forum_view&t=102836&b=11

Product Offers

Caligari GameSpace

For the next 2 months only, Caligari GameSpace can be purchased at a discount of 30%. This brings the price down to:

- \$174.30 (USD)
- £147.20 (GBP)
- £100.80 (GBP)



You can learn more about the features of GameSpace, and order from the product page - <http://www.thegamecreators.com/>

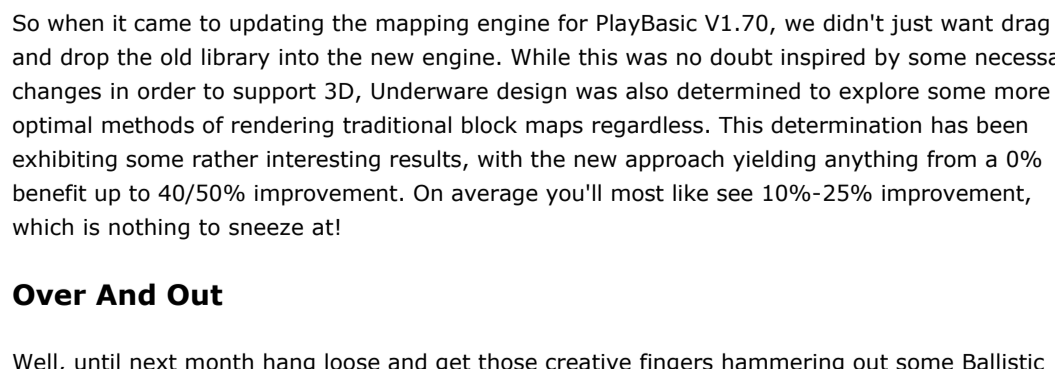
Action3D Reducer

Simplifying your model structure and reducing the polygon count is easily achieved with Action3D Reducer. A 30,000 polygon model can be crunched down by 50% in a matter of seconds, with real-time rendering of the results. The interface is simple, and limbs can be dealt with on an individual basis.

Action3D Reducer has been available through the TGC website for some time now, and is a valuable tool for the avid game maker. If you purchase the product right now, you will receive the Professional version for the same price, allowing you to work with no limits on the original polygon count. There is no specific time limit on this offer, so grab it now while you can.

Product page - http://www.thegamecreators.com/?m=2m-view_product&id=2095

News from the World of FPSXC

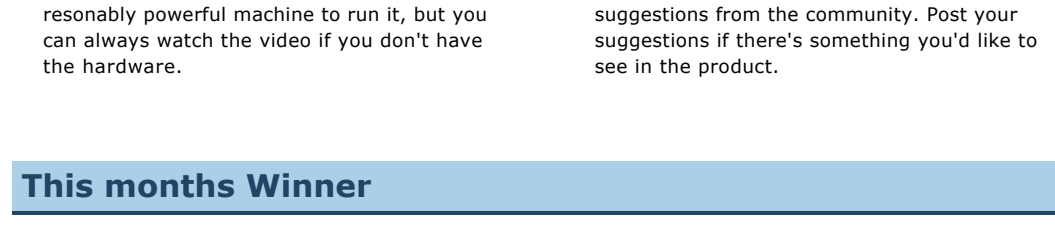


Unleash3D has a simple ethos - serve the growing demand for cheap but high quality models and media for indie game developers. The site, brought to you by Hiroz Jokhi (aka Filya), has been launched with the FPSXC-ready Urban model pack. The online store has now extended to serve users of DB Pro by providing the models in other formats. All of the models can also be bought individually.

Prices start at USD 2.99 for the fully UV mapped and textured models. You can also sample the quality by downloading the free samples.

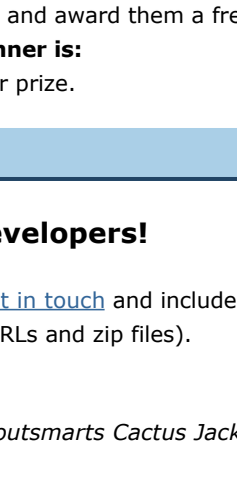
Visit Unleash3D at <http://www.unleash3d.com/>

FPSXC Animation V&F



FPSXC Animation V&F is a simple tool for animating custom weapons and characters in FPSXC. It facilitates the setting of animating ranges and generating the necessary scripts to control them in your game. Features include:

- Importing any supported DBP/FPSXC model format.
- Characters and Weapons modes
- Setting of specific animation preview
- Setting animation start and end frames
- Complete of specific animation ranges
- Onion skin visualisation
- Animation list view
- File editor for editing of your FPE and FPF files
- Exporting of FPE files



the anticipated release date is May 15th, full details are available at <http://www.artemisoftman.com/>

RollingSound inspire young Game Makers

RollingSound create cutting edge, engaging, educational music, film and game projects for young people around the UK. What's more, one of the tools in their box is FPSXC. Over the past three years RollingSound has delivered Music and Film and Gaming courses to over 3,000 young people in London and around the UK. They have a unique and extensive network of youth influencers, recording artists, music industry personnel and other youth arts practitioners. This network helps them create some of the most fresh and innovative digital multimedia arts projects in the UK today.

FPS Creator is used in the Video Game Syllabus. This is a comprehensive course that introduces the full lifecycle of a project. Starting with an introduction to FPSXC as a means of producing a complete game, the basics are covered using inspiring, practical sessions. The possibilities and challenges of creating custom media are realised through Photoshop. Scripting and AI are covered in further sessions, incorporating puzzles and scripted events. The all-important bug testing is naturally part of the course and finally sound, music, menus and packaging are added to complete the product. Every stage has expectations and outcomes that can be measured and provide a record of achievement.

RollingSound run on an outreach basis, serving young people in youth clubs/projects, schools, community centres, pupil referral units, youth offending units etc. The equipment available includes mobile music studio workstations/equipment, top quality DJ workstations, PA and musical instruments.

Click [here](#) to watch a movie about RollingSound and their work (Quicktime format).

You can find out more at the RollingSound website - <http://www.rollingsound.co.uk> or if you have any questions or you've got what it takes to teach others, The RollingSound would like to hear from you. Email info@rollingsound.co.uk to discuss your current requirements.

DarkBASIC Professional Fundamentals

In our continuing series on the basics of the DarkBASIC Professional language, it's time to get things moving! In our last issue, we looked at the basics of the language, and how to set up a simple animation.

Fundamentals Tutorial 5 - Animating Objects

Models can contain animation data. The principles of animating a model reach far beyond the scope of this tutorial, and is a dedicated skill in itself. But in DarkBASIC Professional we can take advantage of the animation already embedded in models. In the first tutorial in this series, a Jeep was loaded. The rotation was achieved through code, not through animation. The Jeep does have animation sequences, but we did not activate these. Let's do that now, and see just how easy it is.

Run the code! (Download the Project Files)

One line of code has enabled the vehicle wheels to spring to life:

```
LOOP OBJECT 1
```

The LOOP OBJECT command can be applied to any object containing embedded animation data, and will enable the animation to run continually, restarting at frame 0 after each cycle. When referring to animations, we use the term *frame* to identify each point along the animation timeline.

More parameters can be applied to the command, to specify a start and end frame:

Try It: Modify the source code to loop through frames 1 to 8. Compile the source code and view the results.

```
LOOP OBJECT 1,1,8
```

This is an unwieldy, jerky looking movement, and this is due to the fact that the wheel is no longer turning a full rotation before repeating. So why would we use this technique? Some models are designed to be used in this way, and it's necessary to select the frames in the forward direction for the current action. For example, it would be common for a character to have walk, run, jump, fall and idling sequences. Looping through every one would look very odd, but choosing a subset of frames gives us a character that can perform a number of actions, all built into one model!

There are other commands in the animation set:

```
PLAY OBJECT 1  
PLAY OBJECT 1,1,8
```

PLAY: An object runs through the animation sequence once, rather than repeating over and over. You may wish to see the wheels as they spin much slower. The speed is set as a percentage of the original, and can even exceed 100 to increase the value beyond the original rate. Here is the full source code again, with the speed doubled:

```
LOAD OBJECT "jeep.u", 1  
SET OBJECT SPEED 1, 200  
LOOP OBJECT 1  
DO  
  ROTATE OBJECT 1, OBJECT ANGLE Y (1) + 0.1  
  CENTER TEXT 400, 500, "Press ESC to end"  
LOOP  
END
```

Of course, you may also need to stop an animated object. This is implemented very simply with one command:

```
STOP OBJECT 1
```

With a few very simple commands, you can bring your characters and other entities to life. The DarkMATTER models contain animation data, and a series of different sequences. As a final example of how everything fits together, you can see here the frame numbers and the response for the DarkMATTER 3 vehicles:

- 000-080 : Smooth Car Drive.
- 080-100 : Static Rumble
- 100-180 : Rumble Drive
- 180-220 : Car Speeds Away - frame 195 = Height of Acceleration
- 220-260 : Car Brakes Heavy - frame 235 = Height of Brake Skid 10deg wheel motion.
- 260-340 : Bank Right - 280/320 Fully Tilted 5deg
- 340-420 : Hand Brake - 360/400 Fully Tilted 5deg +7 UP
- 420-440 : Hand Brake Skid Left
- 440-445 : Orientation Correction
- 445-465 : Hand Brake Skid Right
- 465-470 : Orientation Correction
- 470-490 : Vertical Jump (Petrol Explosion, Jump From Ramping, etc)

Lee's Tip of the Month - Good Bug Hunting Advice

When you have a job comprising twenty thousand line programs, you get paid to do a lot of thinking! One day many years ago I had a profound thought, and one that has helped me overcome some of the most sinister and horrible bugs of my career. It was simply this:

"Don't become angry when your code does not work."
"If the code is bad, would you WANT it to work?"

The truth is this is a powerful (and simple) piece of advice, and even teaches you to welcome a bug when it happens. The bug is not your enemy and not out to harm you, it is showing you that your instructions are not what you had intended and you need to look closer at what you have asked the computer to do.

The next time you encounter a bug that is hard to find, put yourself in the mind of the computer and let's get down to what's happening. The essential is to take a step backwards, step through one line at a time blinking after each item of code. Learn the code afresh, and only do what the code tells you to do, not what you assume the code should do. A bug has many disguises, and its best hiding place is within an assumption.

The computer assumes nothing, takes everything literally and is correct more often than you are. Heed this advice and you will become a general amongst bug slayers!

PlayBASIC News

It's been another busy month in our secret lair, hunched over the keyboards, knocking out line after line of code. This month's challenge - well, obsession - has focused upon creating new techniques for rendering maps. There have been some surprising results. Moreover, the promotion machine is gearing up to drive another game making competition your way. Be afraid, be very afraid...

Coders Ahoy, there's a competition ahead - Ballistic Blasters

Yes, be very afraid, it's time to crown a new programming idol for 2007. So forget school, exams, work or your other half for a few months and let's get down to what's really important - who is the best game programmer? This year successful programmers/designers will:

- Develop a totally ballistic (over the top) shoot-em-up game
- Design their game to incorporate a particular thematic setting
- Be humble in victory while juggling three chainsaws and a rabbit!

So if that sounds like you, and you have enough courage, grit and determination for yet another competition, then [apply within](#).

Mapping

Whatever you call it, Block/Tile Mapping is one of those programming techniques that dates back to the dawn of video games. So it's easy to assume that since it was the optimal approach back in the day, then surely it must be on today's super fast cpu / video card combinations also. Now you might be hurriedly to discover that