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% !TEX encoding = UTF-8 Unicode
% !TEX program = pdflatex
\documentclass[border = 1cm, tikz]{standalone}\usepackage{tikz-3dplot}
\begin{document}
\makeatletter\let\oldpointxyz\pgfpointxyz\def\pgfpointxyz#1#2#3{% perspective projection
\oldpointxyz{#1-\camerax}{#2-\cameray}{#3-\cameraz}%% (x,y,z) is camera center
\pgfmathsetmacro\depth{\rcarot*\pgftemp@x+\rcbrot*\pgftemp@y+\rccrot*\pgftemp@z}
\pgfmathsetlength\pgf@x{\pgf@x*\cameras/(\camerad-\depth)}%% camera scale and distance
\pgfmathsetlength\pgf@y{\pgf@y*\cameras/(\camerad-\depth)}}\makeatother
\tdplotsetmaincoords{50}{120}% 視角
\def\camerax{0}\def\cameray{0}\def\cameraz{8}\def\camerad{40}\def\cameras{20}% 相機中心、距離、倍率
\begin{tikzpicture}[tdplot_main_coords]
\def\block(#1,#2,#3)[#4,#5,#6];{
\pgfmathsetmacro\a{#1}\pgfmathsetmacro\A{\a+1}
\pgfmathsetmacro\b{#2}\pgfmathsetmacro\B{\b+1}
\pgfmathsetmacro\c{#3}\pgfmathsetmacro\C{\c+1}
\pgfmathsetmacro\rnd{rnd*10}
\fill[.! \rnd! #4](\a,\b,\c)--(\A,\b,\c)--(\A,\B,\c)--(\a,\B,\c)--cycle;% 上蓋
\fill[.! \rnd! #5](\A,\b,\c)--(\A,\B,\c)--(\A,\B,\c)--(\A,\b,\c)--cycle;% 左側面
\fill[.! \rnd! #6](\a,\B,\c)--(\a,\B,\c)--(\A,\B,\c)--(\A,\B,\c)--cycle;% 右側面
}
\colorlet{g1}{green!80!}\colorlet{d1}{brown!80!}\colorlet{s1}{gray!80!}% 上色
\colorlet{g2}{green!65!}\colorlet{d2}{brown!65!}\colorlet{s2}{gray!65!}% 左色
\colorlet{g3}{green!50!}\colorlet{d3}{brown!50!}\colorlet{s3}{gray!50!}% 右色
\def\grass(#1,#2,#3){\block(#1,#2,#3)[g1,g2,g3]}% 草方塊
\def\dirt(#1,#2,#3){\block(#1,#2,#3)[d1,d2,d3]}% 土方塊
%\def\stone(#1,#2,#3){\block(#1,#2,#3)[s1,s2,s3]}% 石方塊
\foreach \x in {-15, ..., 15}{
\foreach \y in {-15, ..., 15}{
\pgfmathtruncatemacro\radi{sqrt((\x)^2 + (\y)^2)}% 限制半徑
\ifdim\radi pt < 15pt% 方圓 15 公尺
\pgfmathtruncatemacro\Z{sin(\x*31-\y*19)*3.5 +
sin(\x*17+\y*26)*2 + 5.5}% 地形函數
%\foreach \z in {0, ..., \Z}{\stone(\x,\y,\z)}% 石頭
\dirt(\x,\y,\Z);% 放土
\dirt(\x,\y,\Z+1);% 放土
\grass(\x,\y,\Z+2);% 放草
\fi
}
}
\end{tikzpicture}
\end{document}

```

