1.0 PENGENALAN

Perisian Revit yang akan dipelajari kelak adalah menjurus kepada pembelajaran asas bagi penggunaan Model Revit untuk tujuan mendapatkan maklumat kuantiti bahan/material daripada model Revit yang telah siap dibangunkan.

2.0 PERISIAN AUTODESK REVIT

- 2.1 Perisian Revit adalah satu perisian BIM (3D berparametrik) yang digunakan untuk merekabentuk model serta menghasilkan dokumentasi untuk keperluan sesebuah projek bangunan. Antara kelebihan perisian ini adalah:
 - Menghasilkan model 3D yang bermaklumat
 - Persembahan model 3D
 - Koordinasi model boleh dijalankan dengan menggabungkan model disiplin lain
 - Maklumat yang boleh dikolaborasi dengan perisian lain
 - Paparan (pelan, pandangan dan seksyen) boleh dijana secara automatik melalui model
 - Dokumentasi (lukisan dan jadual maklumat kuantiti) boleh dijana daripada model

Sumber rujukan : 1) CostX Release Notes

2) Advanced CostXTechniques Notes

3) Nota Kursus Model Revit Management for BIM Coordinator -Ir. Mohd Faiz



Gambar 1 : Contoh Paparan Revit



Gambar 2 : Contoh Paparan Revit

3.0 KONVENSYEN PENAMAAN

3.1 Penamaan Projek - dibuat oleh Penyelaras BIM Projek (Ketua HODT)

[Kod Projek] _ [Tahun] - [No.Pendaftaran Projek] _ [Nama Projek]

3.2 Penamaan Model Projek - dibuat oleh Penyelaras BIM setiap disiplin

[Tarikh] _ jkr[Disiplin] - [Fasa Projek] _ [Kod Projek] _ [Nama Projek]

2014-07-03a_jkrAR-3_(BMkk5a_14-001)_Klinik Kesihatan Maran

3.3 Penamaan Model Tapak dan Model Bangunan (Model Projek) oleh Penyelaras BIM Arkitek



Gambar 3 : Contoh Projek - Gabungan Model Tapak dan Model Bangunan

[Tarikh] _ jkr[Disiplin] - [Fasa Projek] _ [Kod Projek] _ [Blok Bangunan] _ [Zon/Aras Bangunan] _ [Nama Bangunan]



Projek BIM							
	BMhppb_17-001_Hospital Pt Buntar		Projek Bl	3IM			
-	01 Pengurus Projek			BMkk	5a_13	-002_Klinik Kesihatan	
	02 Arkitek			02 Ark	titek		
	03 Sivil				0201	1 Model Tapak	
	04 Struktur				R	2014-07-03a ikr&P-3 (BMkk5a 14-001) SP w PT KKMaran	
	05 Mekanikal			-	0.20/	2014-07-03a_K/AK-0_(DWKK0a_14-001)_3F_W_F1 KKWatan	
	06 Elektrik				0202	z Model Klinik Kesinalari	
	07 Ukur Bahan				ĸ	2014-07-03a_jkrAR-3_(BMkk5a_14-001)_A1_w_KK5a	
	08 Pegawai Penguasa				0203	3 Model Blok Sokongan	
	*09 Geoteknik				K	2014-07-03a_jkrAR-2_(BMbp1_14-001)_B1_w_Balai Pengawal	
	*10 Jambatan				R	2014-07-03a_jkrAR-2_(BMrp1_14-001)_C1_w_Rumah Pam	
	*11 Alam Sekitar				R	2014-07-03a_jkrAR-2_(BMpe2_14-001)_D1_w_Pencawang Elektrik	
	*12 Kontraktor				R	2014-07-03a_jkrAR-2_(BMps1_14-001)_E1_w_Pondok Sampah	
*Sekiranya t	erlibat dan data perlu dikongsi oleh pasukan projek				R	2014-07-03a_jkrAR-2_(BMtlk_14-001)_F1_w_TLK	

Gambar 4 : Contoh Struktur Folder Projek dan Penamaan Mengikut Model



Gambar 5 : Hirarki Komponen/Elemen dalam perisian Revit

4.0 JADUAL MATERIAL REVIT



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Gambar 7 : Kaedah untuk Semakan Kuantiti Berdasarkan Lukisan 3D/Model



5.0 EKSPORT MAKLUMAT JADUAL MATERIAL KUANTITI KE EXCEL

NO.	TASK	DESCRIPTION
1	Maklumat Jadual Material	
	dengan kuantiti yang	20170724c
	dipaparkan tersebut	e Massing & Site Co
	boleh dieksport ke dalam	
	format .xls :	New Saves a 3D view as an FBX file. All Data
	• Klik logo Revit di	Open Family Types Exports family types from the current family to a text (.txt) file.
	sebelah penjuru	Save gbXML Saves the project as a gbXML file.
	[Export] \rightarrow	Save As Save As Save Sthe conceptual energy model as a gbXML file. Saves the conceptual energy model as a gbXML file. Save Sthe Conceptual energy model as Save
	[Reports] → [Schedule].	Export FC Saves an IFC file.
	Tekan butang	Suite Workflow S Source Saves model data to an ODBC database Saves model data to an ODBC database.
	[Save] dalam format_txt	Publish Pub
	Simpan fail	Print Print Reports Saves a schedule or Room/Area Print Room/Area Report
	folder [Project	Close Options Sets export options for CAD and IFC.
	CostXJ pada desktop.	Options Exit Revit
	 Paparan menu [Export Schedule], klik butang [OK]. 	File name:
		Export Schedule ×
		Schedule appearance Export title Export column headers Include grouped column headers Export group headers, footers, and blank lines Output options Field delimiter: Text qualifier: OK Cancel

NO.	TASK	DESCRIPTION
2	Buka Workbook	
	baru di Excel.	
		JkrAK_sch_flr_Floor Schedule 2.txt
	 Klik butang 	
	[Open] pada	Text Import Wizard - Step 1 of 3 ? X
	Workbook baru	The Text Wizard has determined that your data is Delimited.
	tersebut dan pilih	If this is correct, choose Next, or choose the data type that best describes your data. Original data type
	fail .txt yang telah	Choose the file type that best describes your data: © Delimited - Characters such as commas or tabs separate each field.
	disimpan tadi.	Prieco groun - ritelus are angine un colonins mich spaces between each neux.
	-	Start import at tow.
	 Menu [Text 	My data has headers.
	Import Wizard]	Preview of file L:Kursus_CostX:KursusCostX:10 COST X: NOTE
	yang mengandungi	A JAAA BULLAL AND WINNERS A A "Family" Type "Description" Area" 3 manuary and a second a
	3 langkah akan	<pre>s_ision: iterision: set =ision: set antai suu x su</pre>
	dipaparkan. Tekan	Cancel < Buds Finish
	butang [Next]	
	bagi setiap	Text Import Wizard - Step 2 of 3 ? X
	langkah dan	This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.
	butang [Finish]	Delimiters ☑ Ţab
	bagi langkah yang	Semicolon Treat consecutive delimiters as one Comma Treat construction
	terakhir.	Space Quence Quence
		Data greview
		paragesch_flr_Floor Schedule 2
		Family Lype Floor jkrAR_fir-f_(LTjhO6)-3 Kemasan Lantai 300 x
		₽ < >
		Cancel < Back Einish
		Text Import Wizard - Step 3 of 3 ? × This screen lets you select each column and set the Data Format.
		Column data format
		General converts numeric values to numbers, date values to dates, and all remaining values to text.
		O Do not import column (skip)
		Data preview
		General General
		jKrAR_sch_flr_Floor Schedule 2 Family Type
		<pre>Floor jkrAR_flr-f_(LTjh06)-3 Kemasan Lantai 300 x 1</pre>
		Cancel < Back Nett>

F	ILE HOME I	NSERT	PAGE LAYOUT FORMULA	S DATA REVIEW VIEW	
Pa	ste v B I L	J → [$ \begin{array}{c c} \bullet & \bullet \\ \bullet \\$	Image: Wrap Text General Image: Genera	iditional Format as Cell natting ← Table ← Styles ←
	podata (si)	10		Algiment at Number at	Styles
E2	.6 -	± 2	$\langle \checkmark f_x $		
	Δ		B	C	D
1	ikrAR sch flr Floor S	Schedul	e 2	-	
2	Family		Type	Description	Area
3	•			•	
4	Floor		jkrAR_flr-f_(LTjh06)-3 Kemasan	(LTkt01a) Floor slab-150mm Tebal Struktur Konkrit	230.38 m ²
5		1			230.38 m ²
6		1			230.38 m ²
			jkrAR_flr_Lfy_lp_15_UM_in_(L Fy001_LF01a)-3 Kemasan		
7	Floor		Jejalur Kayu	(LFy001a) Jejalur Kayu	573.49 m²
8		2			573.49 m²
9		2			573.49 m²
			jkrAR_flr_LTf_cr1_30_UM_in_(LTf115a)-3 Kemasan - Cement		
10	Floor		sand screed, smooth finish	(LTF115a) Cement sand screed, smooth finish	229.13 m ²
11		14			229.13 m ²
12		14	ikrAD fir LTf or 2 20 LIM in /		229.13 m²
			LTf116a)-3 Kemasan - Cement sand screed with Floor		
13	Floor		Hardener	(FTf116a)Cement sand screed with Floor Hardener	120.84 m ²
14		1			120.84 m ²
15		1			120.84 m ²
			JkrAR_flr_LI1_ht5_30_UM_in_(LTf129a)-3 Kemasan - Anti-slip Porcelain Tiles - 300mm x	(LTf129a)300mm x 300mm anti slip Porcelain Tiles(B1a- MS1294)	
16	Floor		300mm (B1a- MS1294)		91.97 m²
17		38			91.97 m²
18		38			91.97 m²
			jkrAR_flr_LTk_kt1_150_UM_in _(LT003)-3 Floor slab-150mm	(LTkt01b) 175mm Lantai struktur konkrit tetulang cerun landai ke lonkang tertutup pada butiran jurutera	
19	Floor		Tebal Struktur Konkrit Tetulang		92.58 m ²
20		23			92.58 m²
21		23			92.58 m²
22		79			1338.38 m²

Gambar 9 : Format Paparan Jadual Kuantiti Material dalam Excel

SYSTEM ASSEMBLIES	PARTS
Dalam Revit, beberapa elemen boleh digabungkan menjadi satu komponen (assembly) yang mempunyai maklumat tersendiri bagi setiap elemen tersebut untuk tujuan penyediaan jadual maklumat bahan, <i>tagging</i> dan <i>filter</i> . <i>Layer elements</i> seperti <i>walls, ceilings</i> dan <i>floors</i> biasanya akan dimodelkan sebagai ' <i>assemblies</i> '.	Dalam Revit, beberapa elemen boleh juga dipecahkan kepada bahagian yang berasingan yang mempunyai maklumat tersendiri tujuan penyediaan jadual maklumat bahan, <i>tagging</i> dan <i>filter</i> . Fungsi Parts dalam Revit membolehkan maklumat dalam <i>layer</i> <i>elements</i> seperti <i>walls</i> , <i>ceilings</i> dan <i>floors</i> dijana untuk tujuan mendapatkan maklumat kuantiti material.
Edit Assembly Ferrify: Ford: Perfy: Ford: Ford: Termed Ness: 56.6259 FU/FB Statusture [1] Core Boundary Legit Bolt Screed 200 Statusture [1] Core Boundary Legit Bolt Screed 200	Est Assembly ************************************

Modul 2 - Revit for Material Take-Off 2019



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Modul 2 - Revit for Material Take-Off 2019

