

грађевинско-архитектонски факултет у нишу
примена рачунара у архитектури

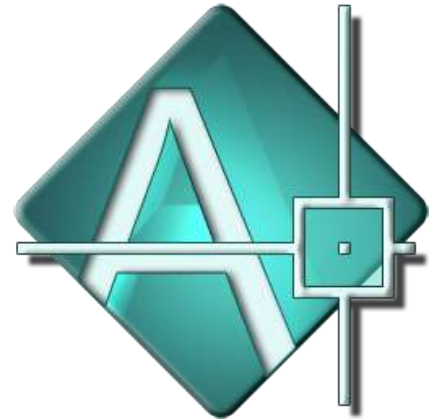
04.

предавање

др Владан Николић

AutoCAD

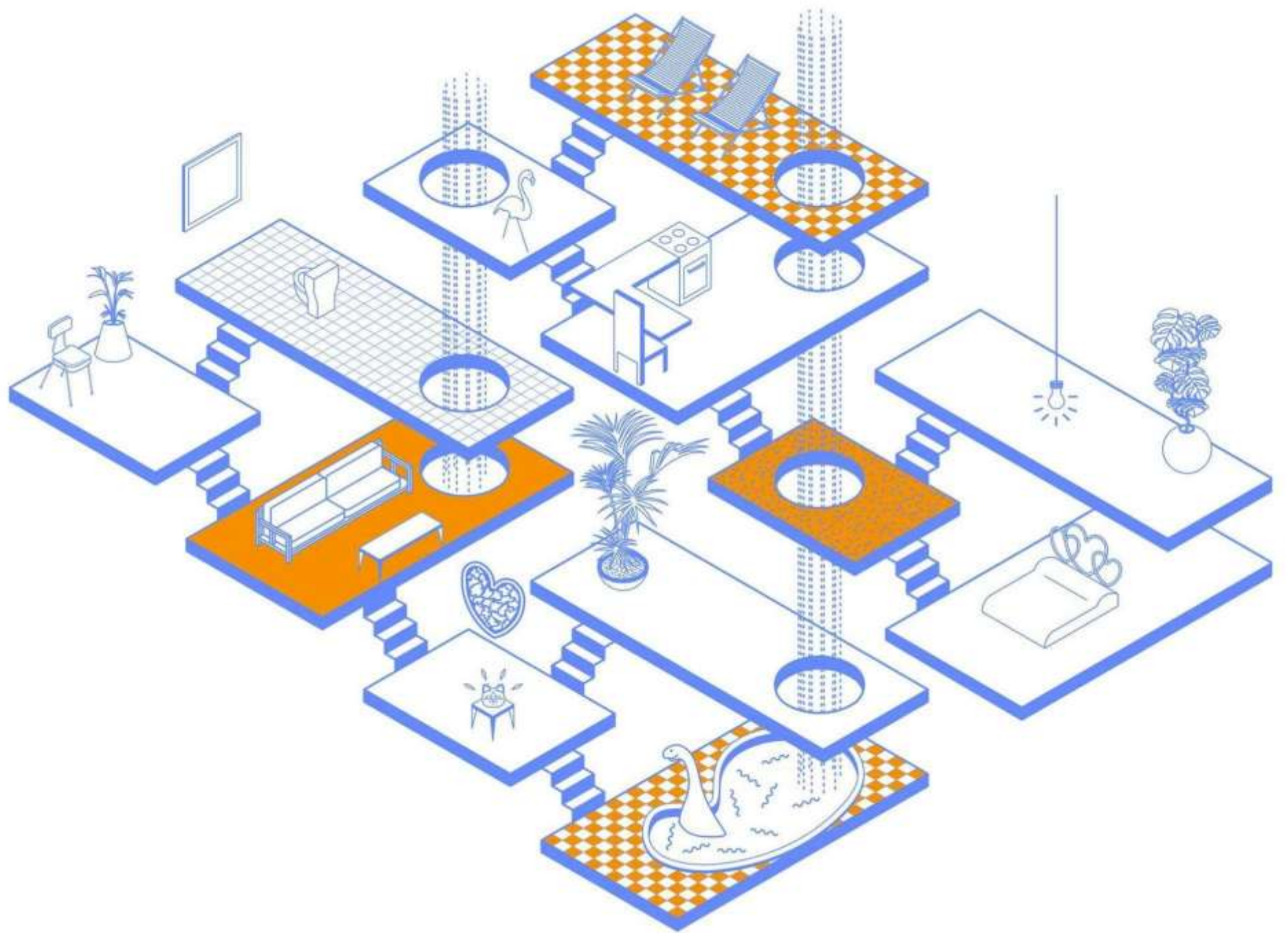
у процесу архитектонског
пројектовања

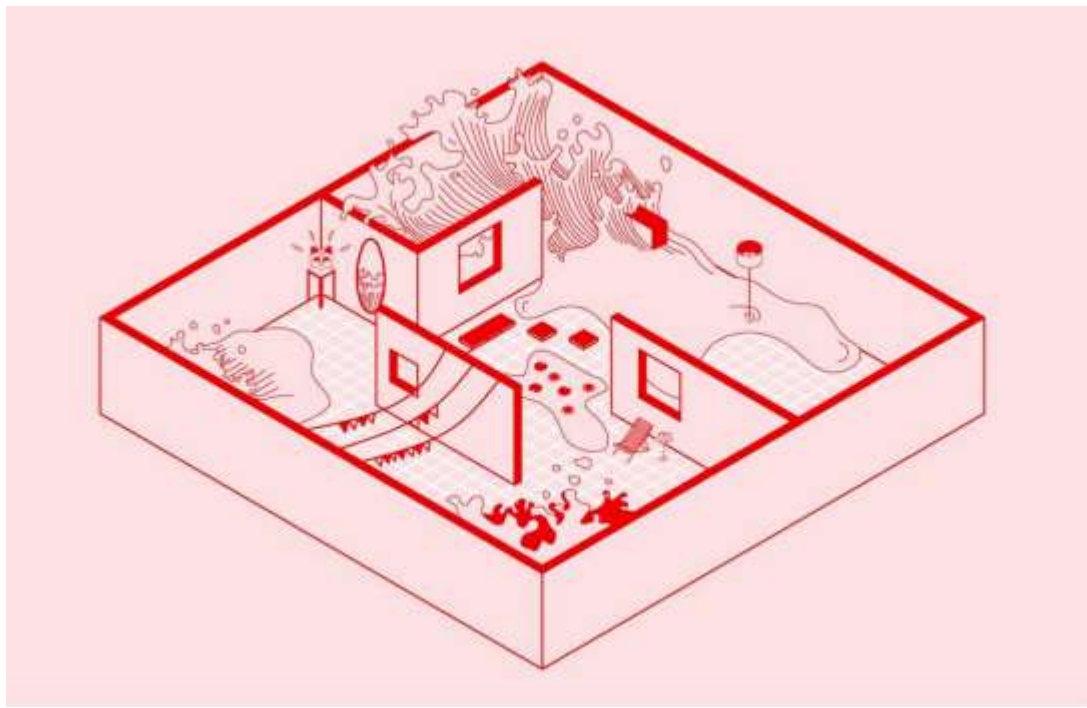
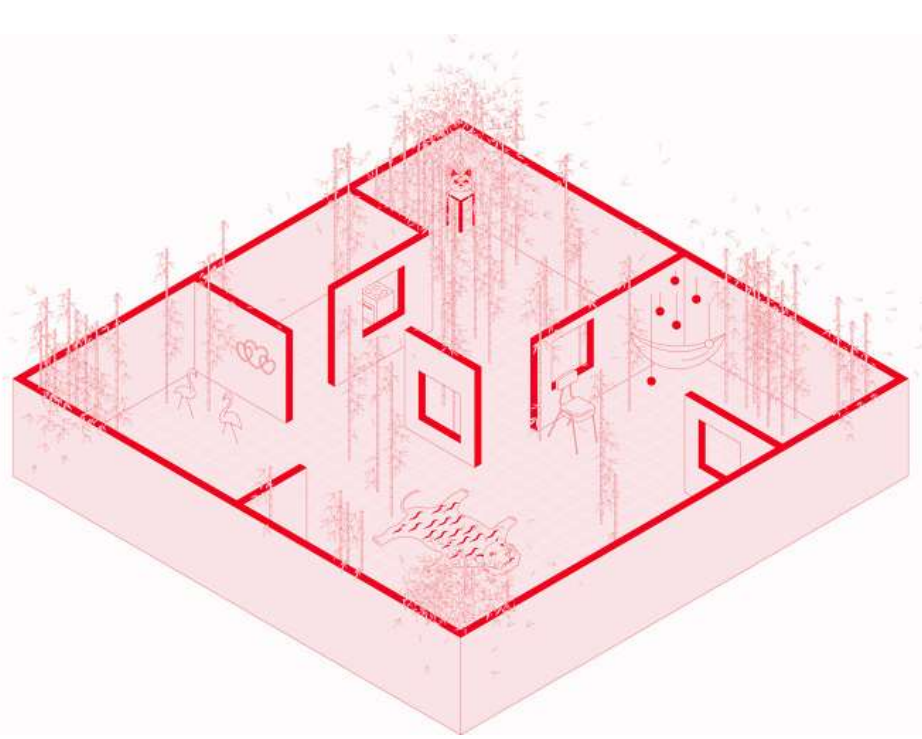
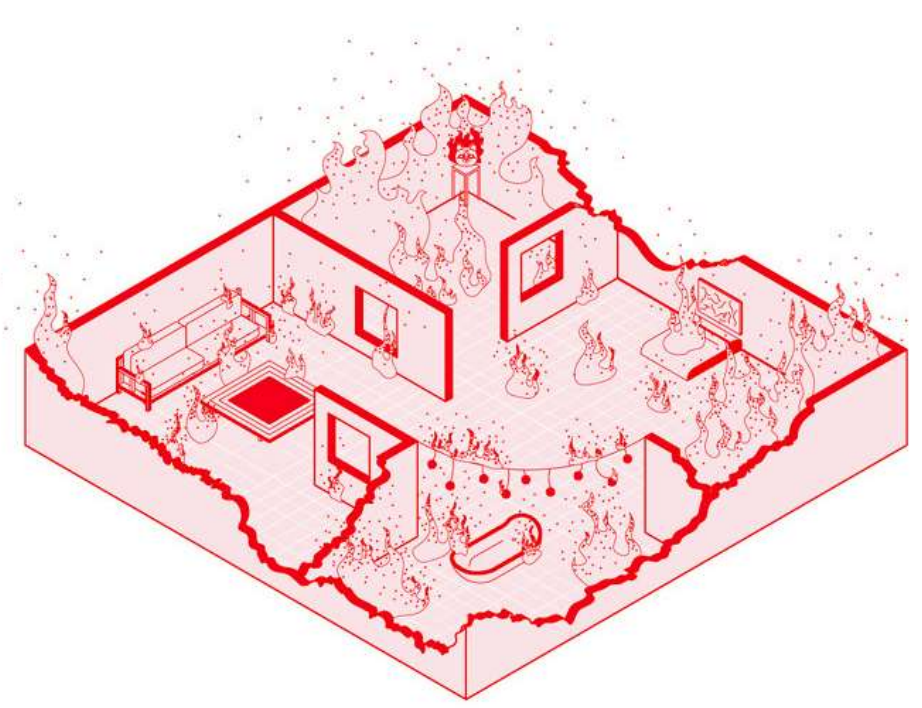


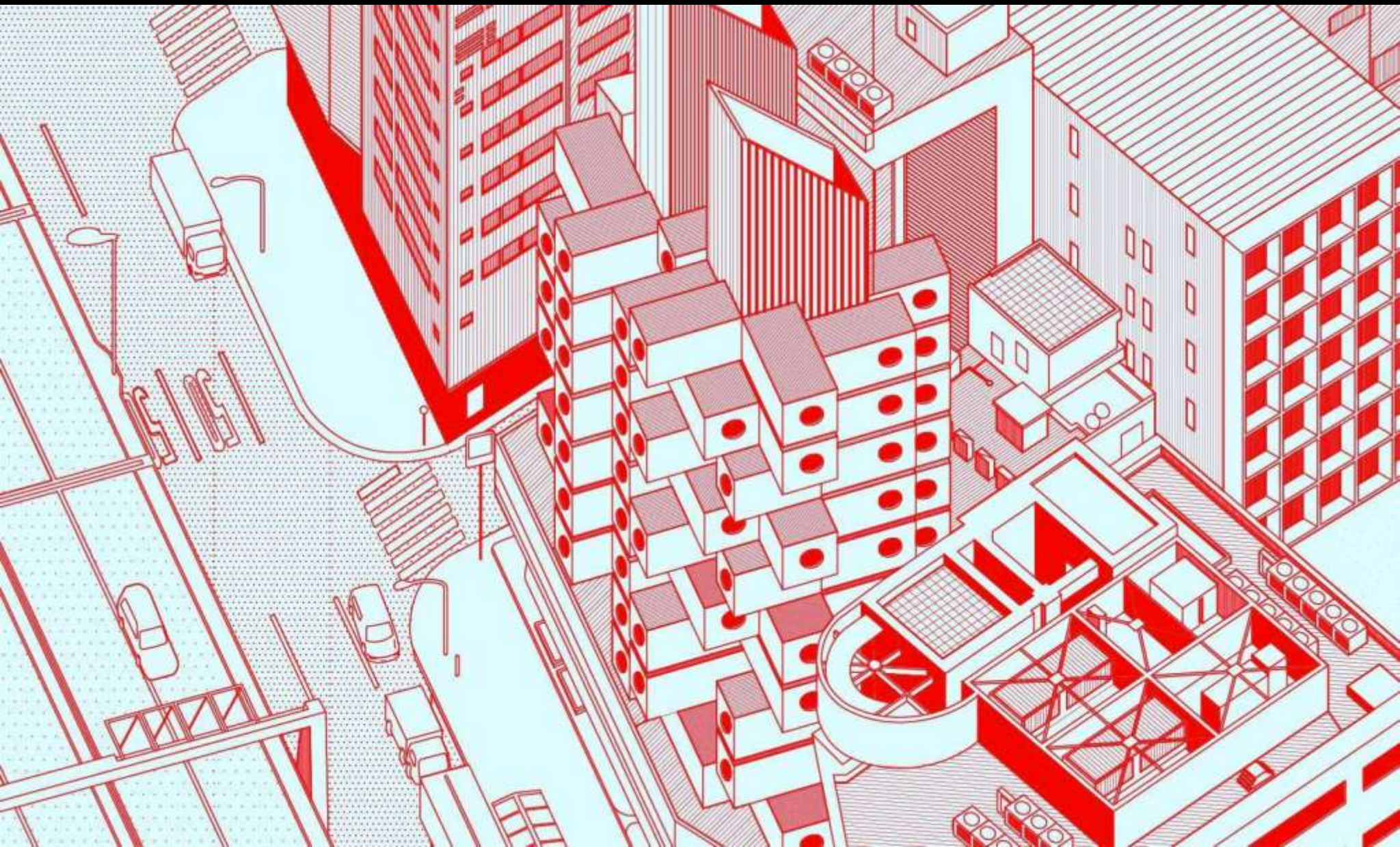
AutoCAD 2021











AutoCAD

Историјат и развој



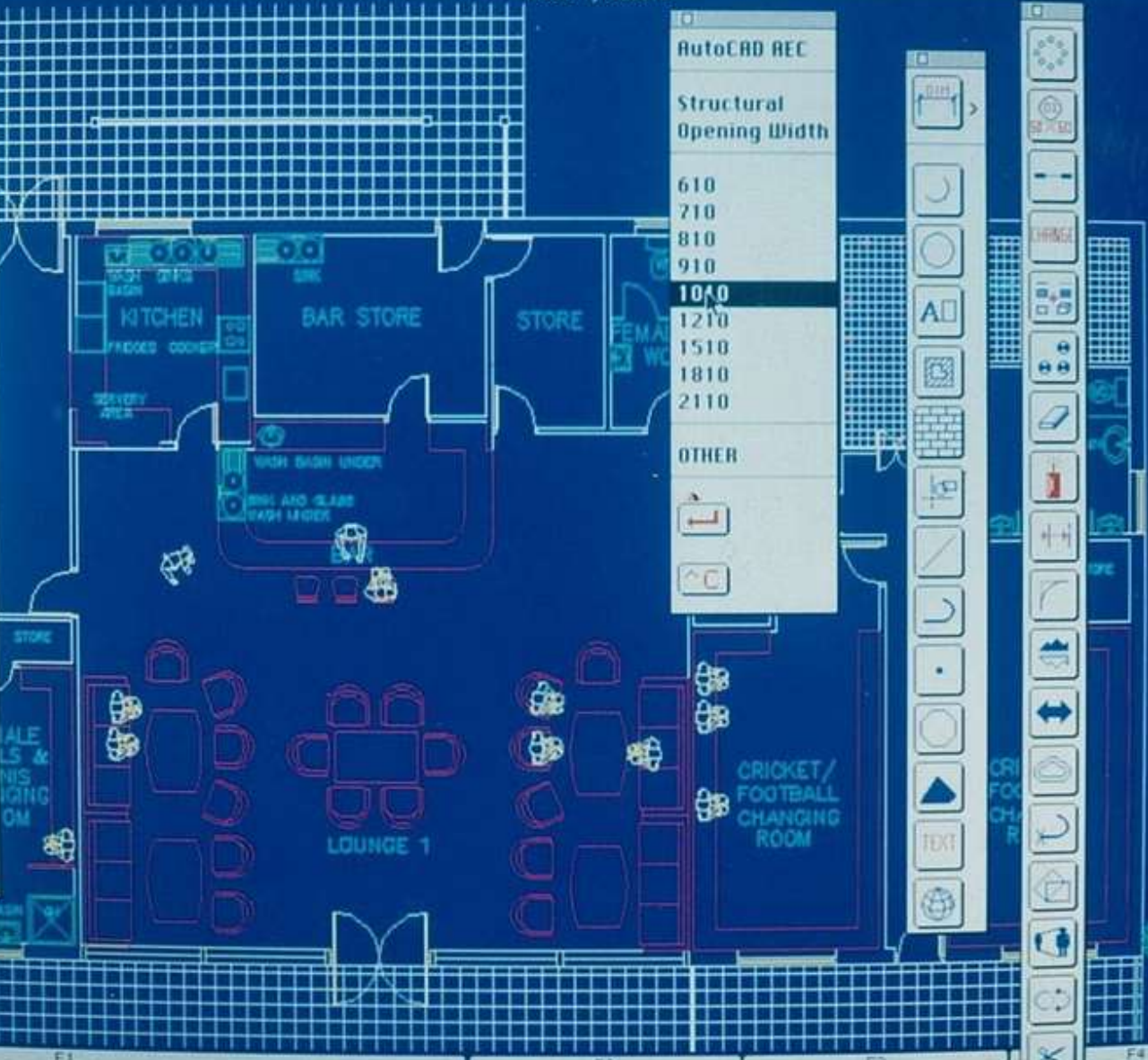
AUTOCAD[®]

COPYRIGHTED SOFTWARE, 1982, 1983 & 1984

PRODUCT AutoCAD-86 (IBM PC)
MODEL NO. Sample Drawings
SERIAL NO. 11 November 83

AutoCAD 86
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- Columns & Blocks ->
- Roofs & Ceilings ->
- Windows ->
- Door insertions...
- Special doorways...
- Offset doors
- Remove doors
- Reflect swing
- Adjust height
- Reverse double-swing
- Jambs
- Insert attributes
- Edit attributes



AutoCAD REC

Structural Opening Width

610
710
810
910
1010
1210
1510
1810
2110

OTHER

Vertical toolbar containing various CAD tools such as:

- Window selection tools
- Move, copy, and paste tools
- Trim, extend, and fillet tools
- Circle and arc tools
- Text tool
- Zoom and pan tools

Insertion mode: 3D
Enter door width (910.0): |

1977 - 1979

InteractCAD



1982



	Verzija programa	Godina		Verzija programa	Godina
1	AutoCAD Version 1.0	1982	21	AutoCAD 2007	2006
2	AutoCAD Version 1.2	1983	22	AutoCAD 2008	2007
3	AutoCAD Version 1.3	1983	23	AutoCAD 2009	2008
4	AutoCAD Version 1.4	1983	24	AutoCAD 2010	2009
5	AutoCAD Version 2.0	1984	25	AutoCAD 2011	2010
6	AutoCAD Version 2.1	1985	26	AutoCAD 2012	2011
7	AutoCAD Version 2.5	1986	27	AutoCAD 2013	2012
8	AutoCAD Version 2.6	1987	28	AutoCAD 2014	2013
9	AutoCAD Release 9	1987	29	AutoCAD 2015	2014
10	AutoCAD Release 10	1988	30	AutoCAD 2016	2015
11	AutoCAD Release 11	1990	31	AutoCAD 2017	2016
12	AutoCAD Release 12	1992	32	AutoCAD 2018	2017
13	AutoCAD Release 13	1994	33	AutoCAD 2019	2018
14	AutoCAD Release 14	1997	34	AutoCAD 2020	2019
15	AutoCAD 2000	1999			
16	AutoCAD 2000i	2000	35	AutoCAD 2021	2020
17	AutoCAD 2002	2001			
18	AutoCAD 2004	2003			
19	AutoCAD 2005	2004		AutoCAD 2022	2021
20	AutoCAD 2006	2005			

2020

2021



Матични формат записа је **.DWG**



AUTOCAD

3 AUTODESK®
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2020



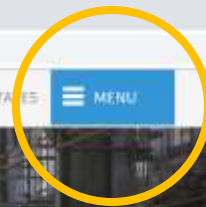
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AutoCAD

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и инсталација**



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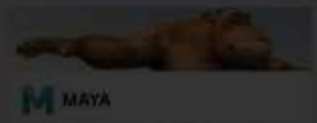
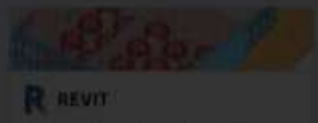
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Windows 64-bit	✓
English	✓

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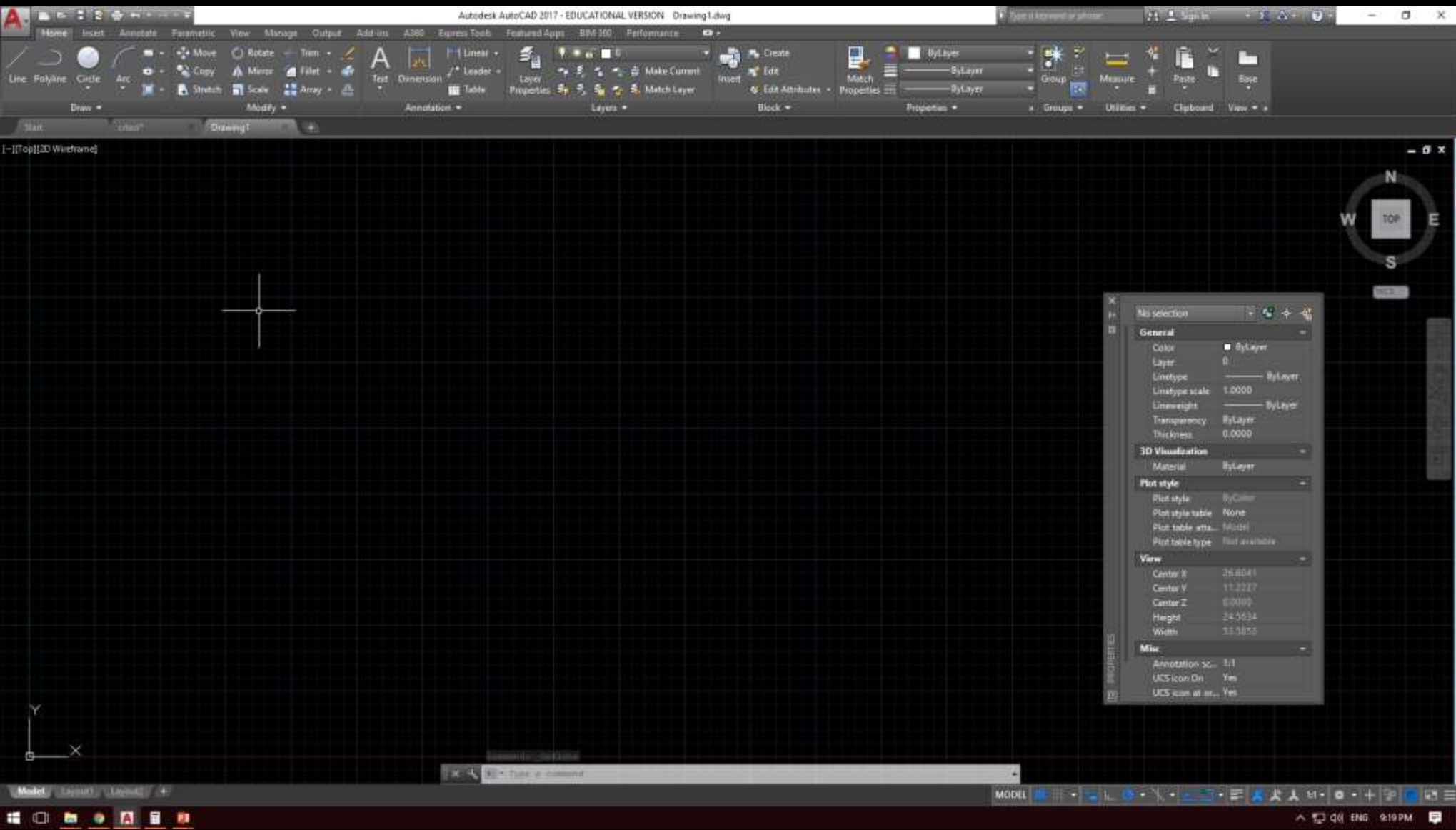
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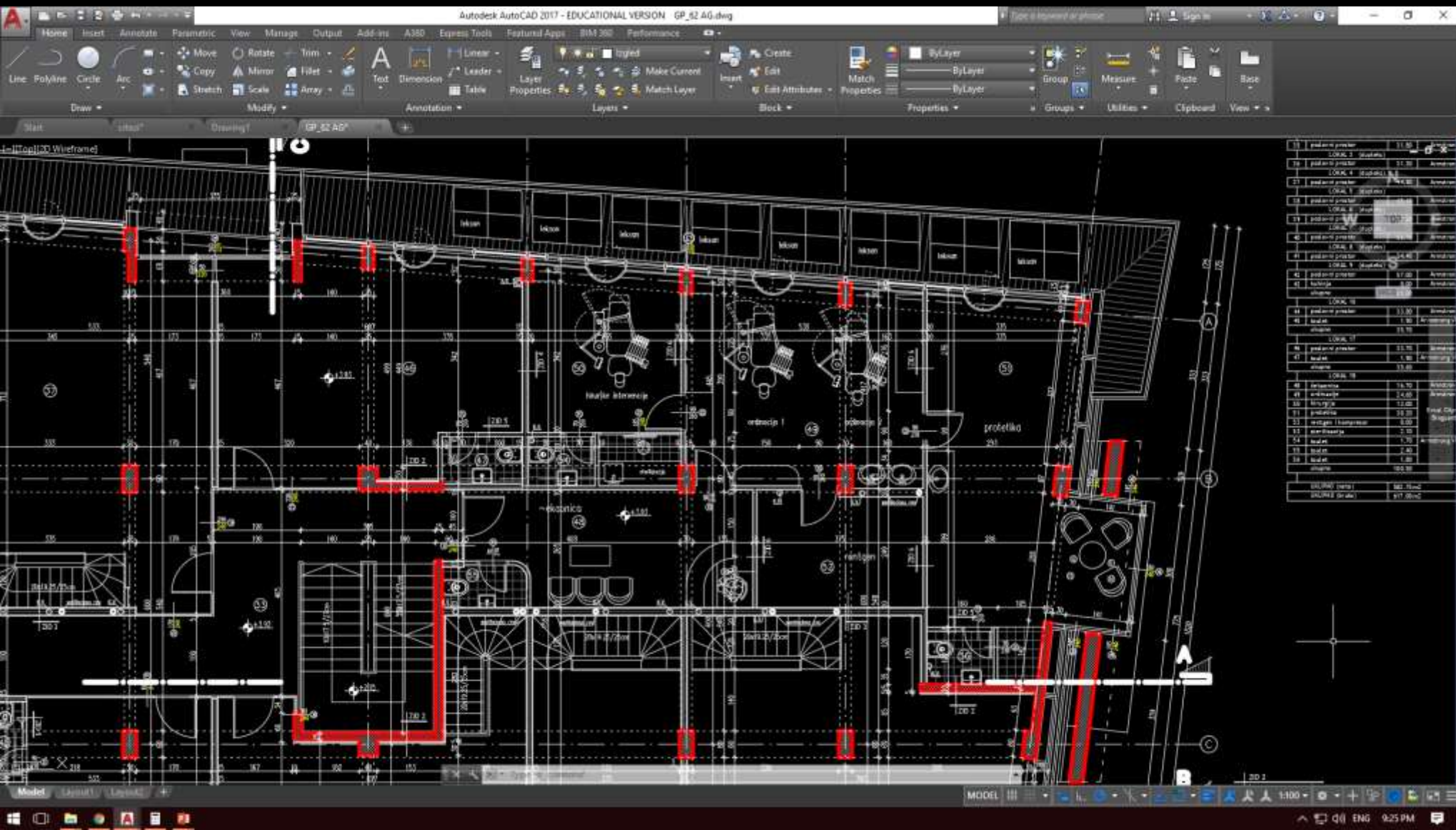


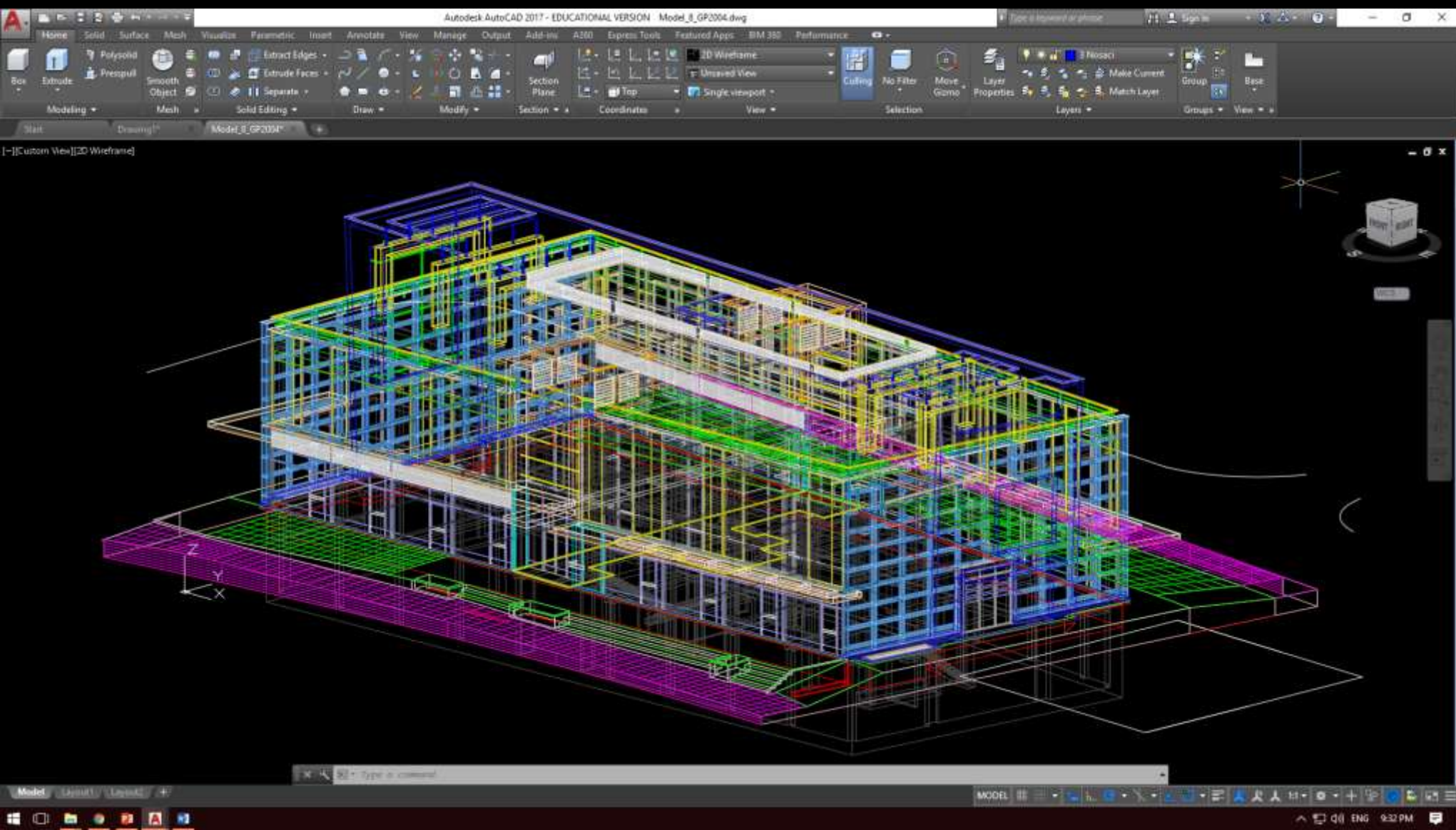
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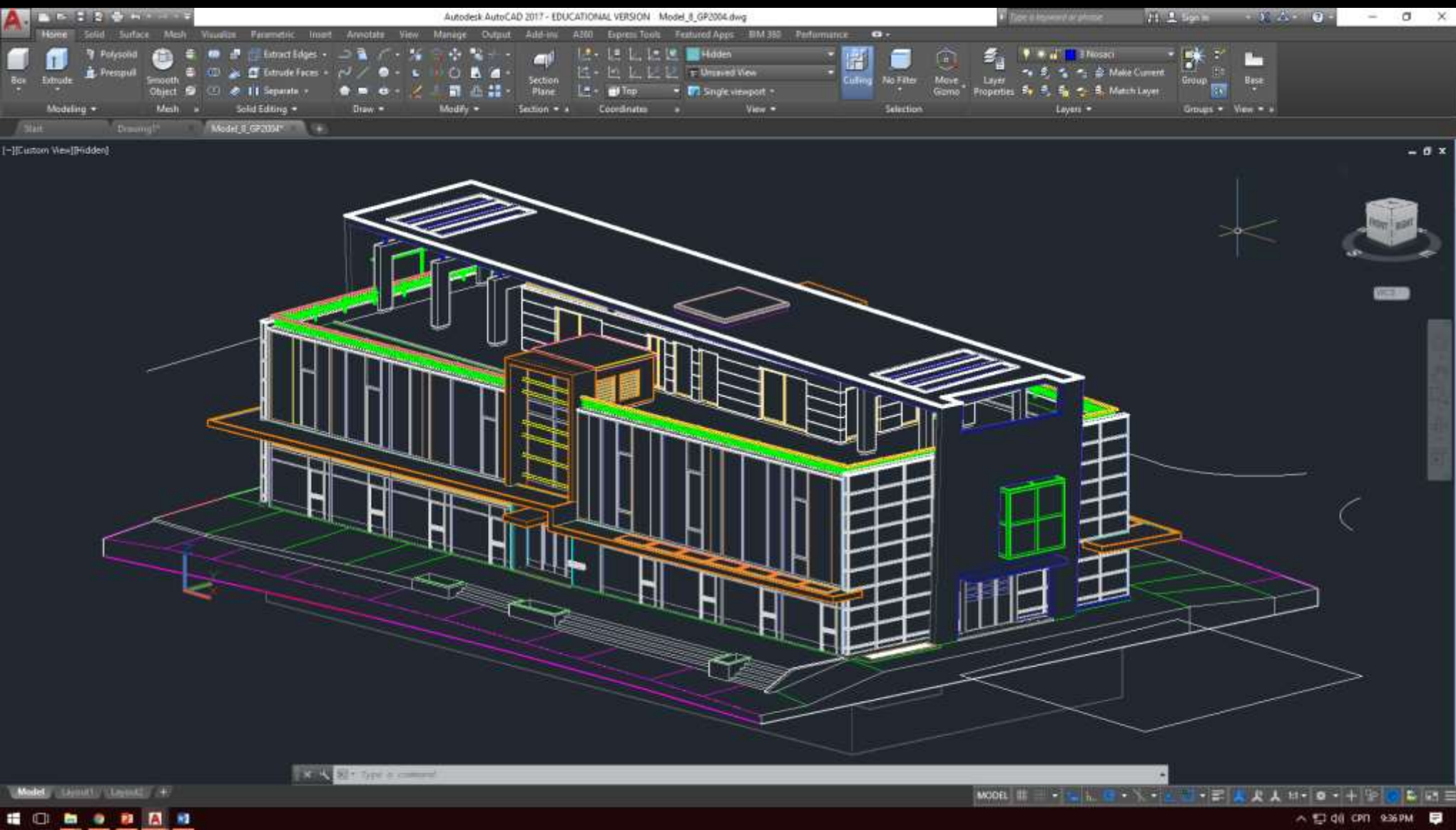
initializing...

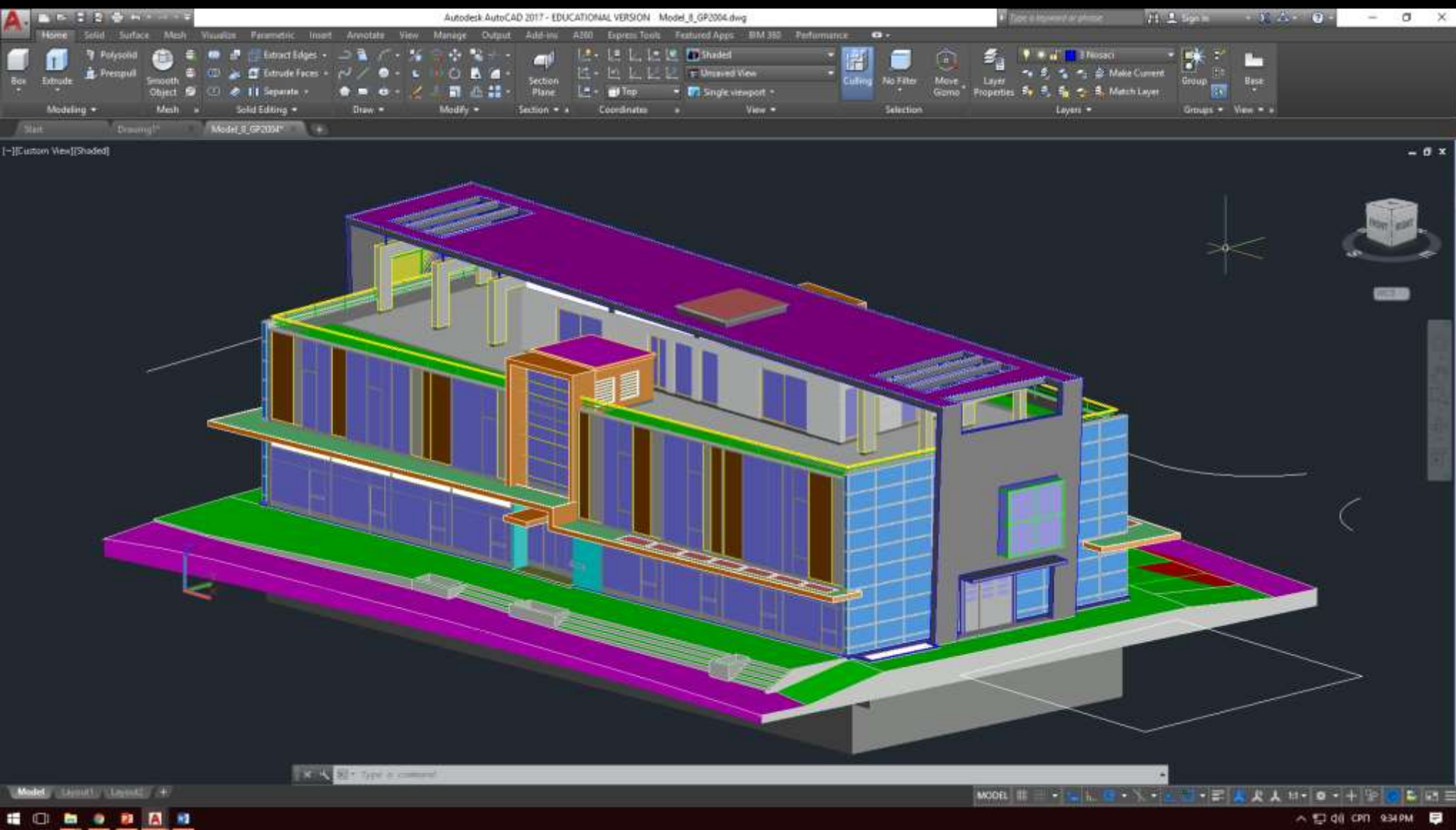


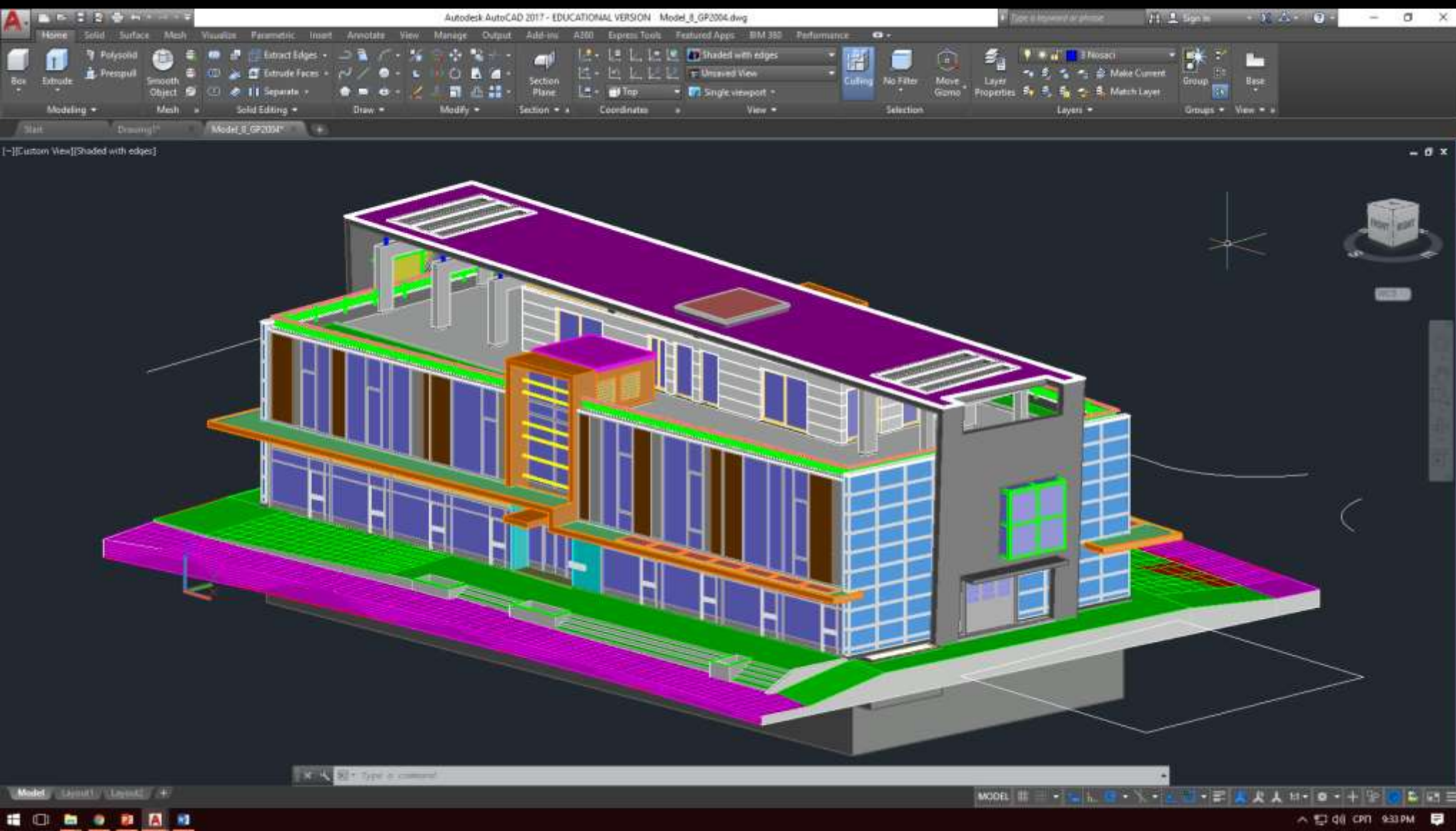


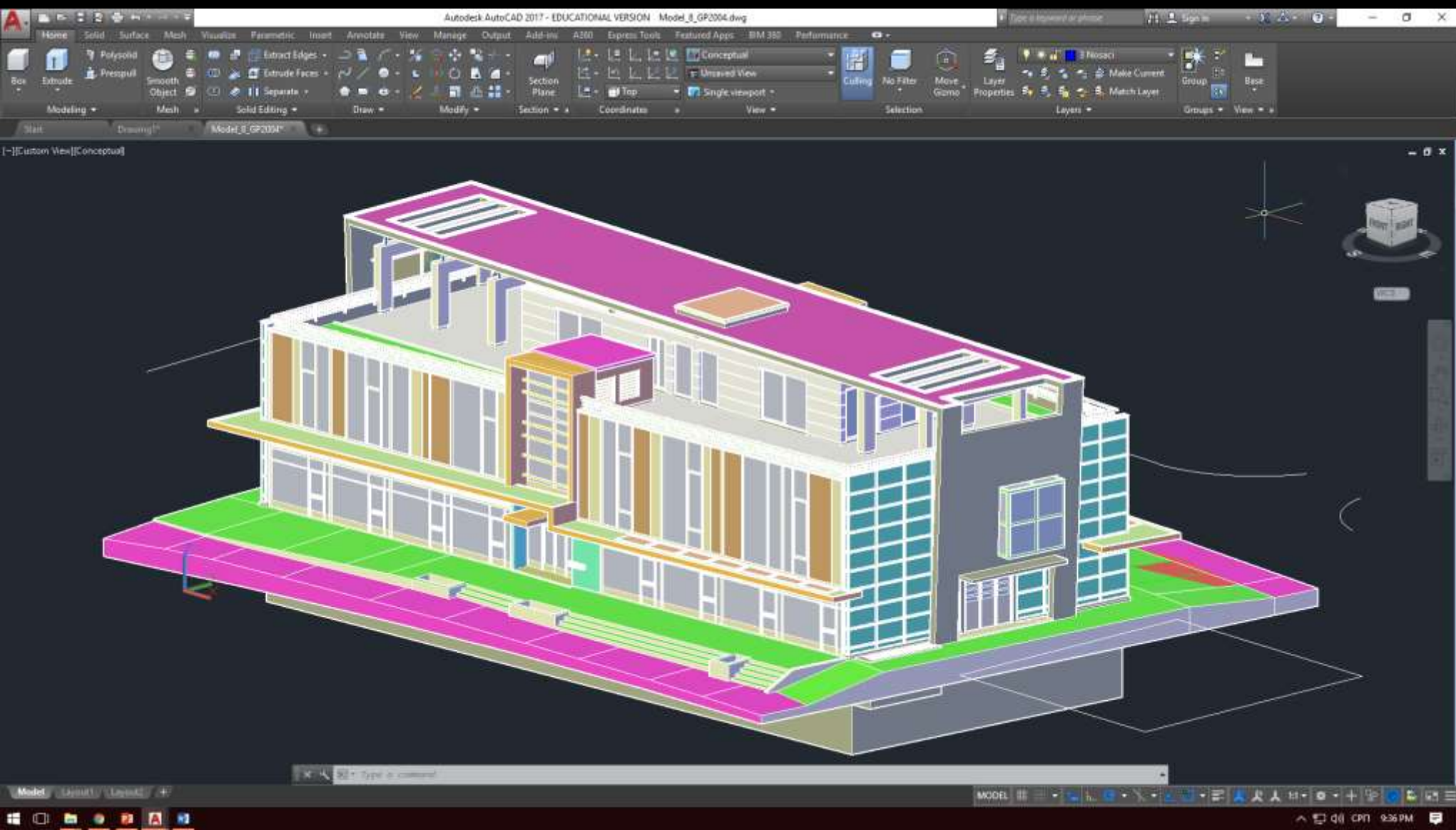


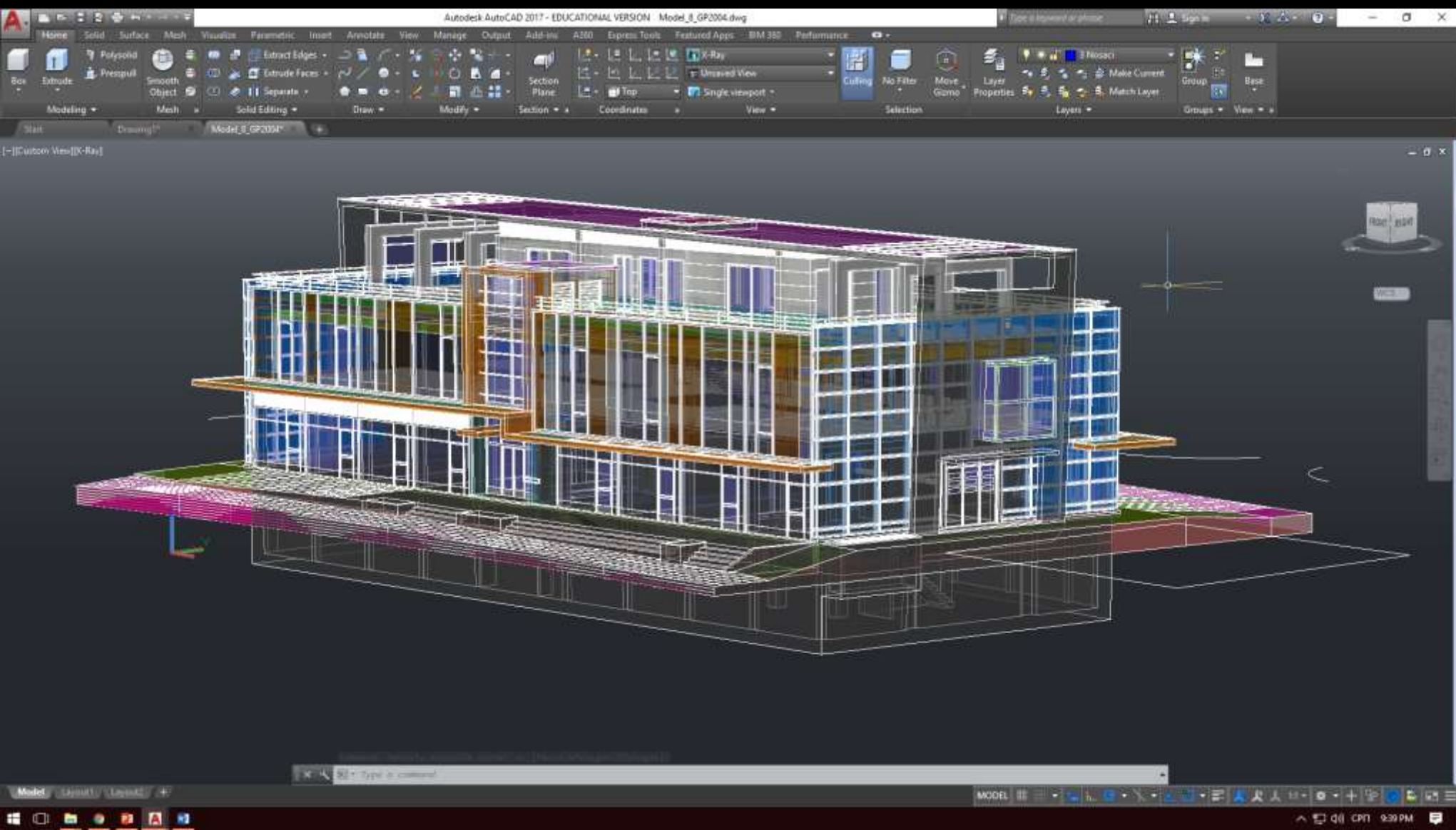




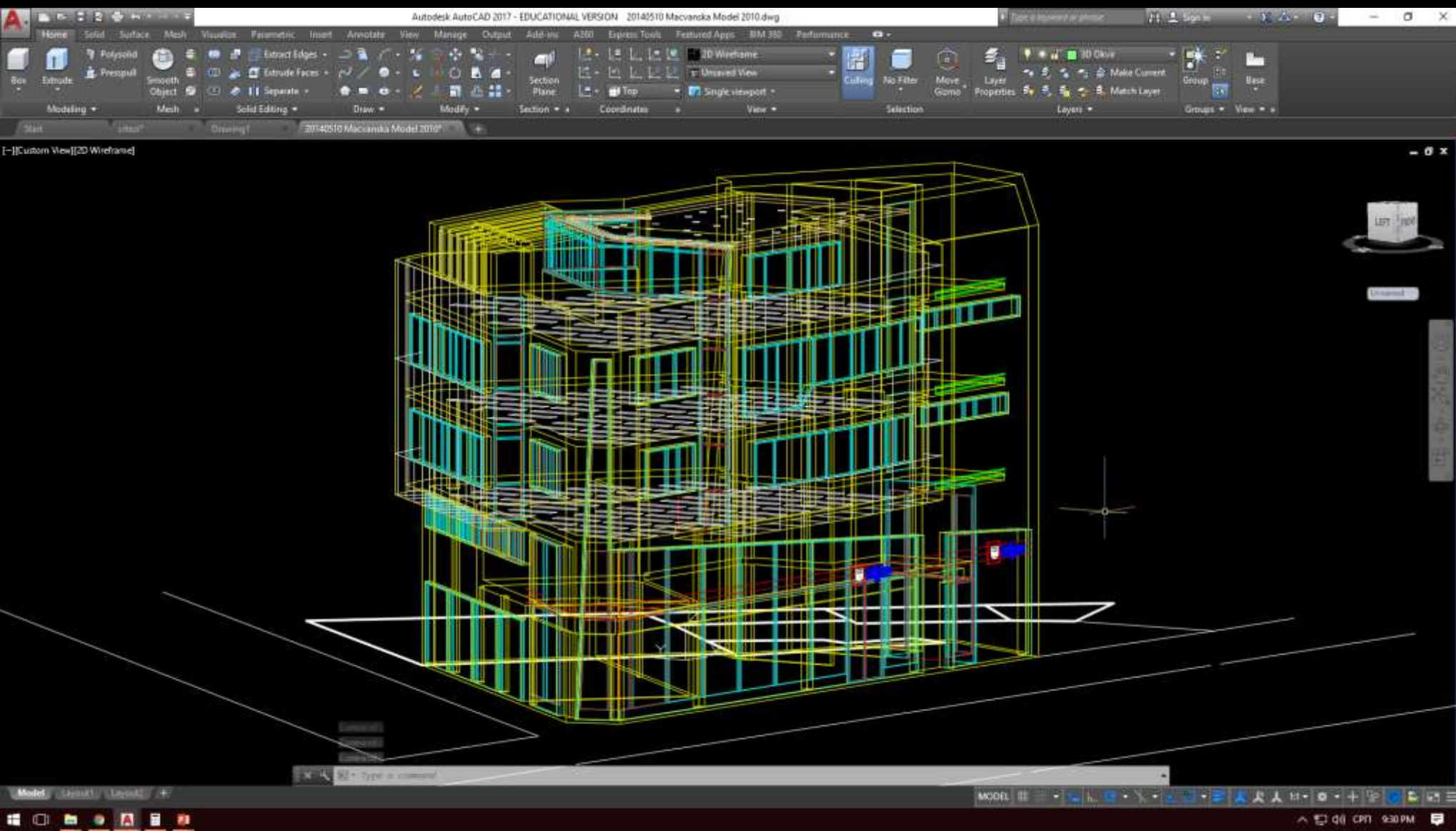


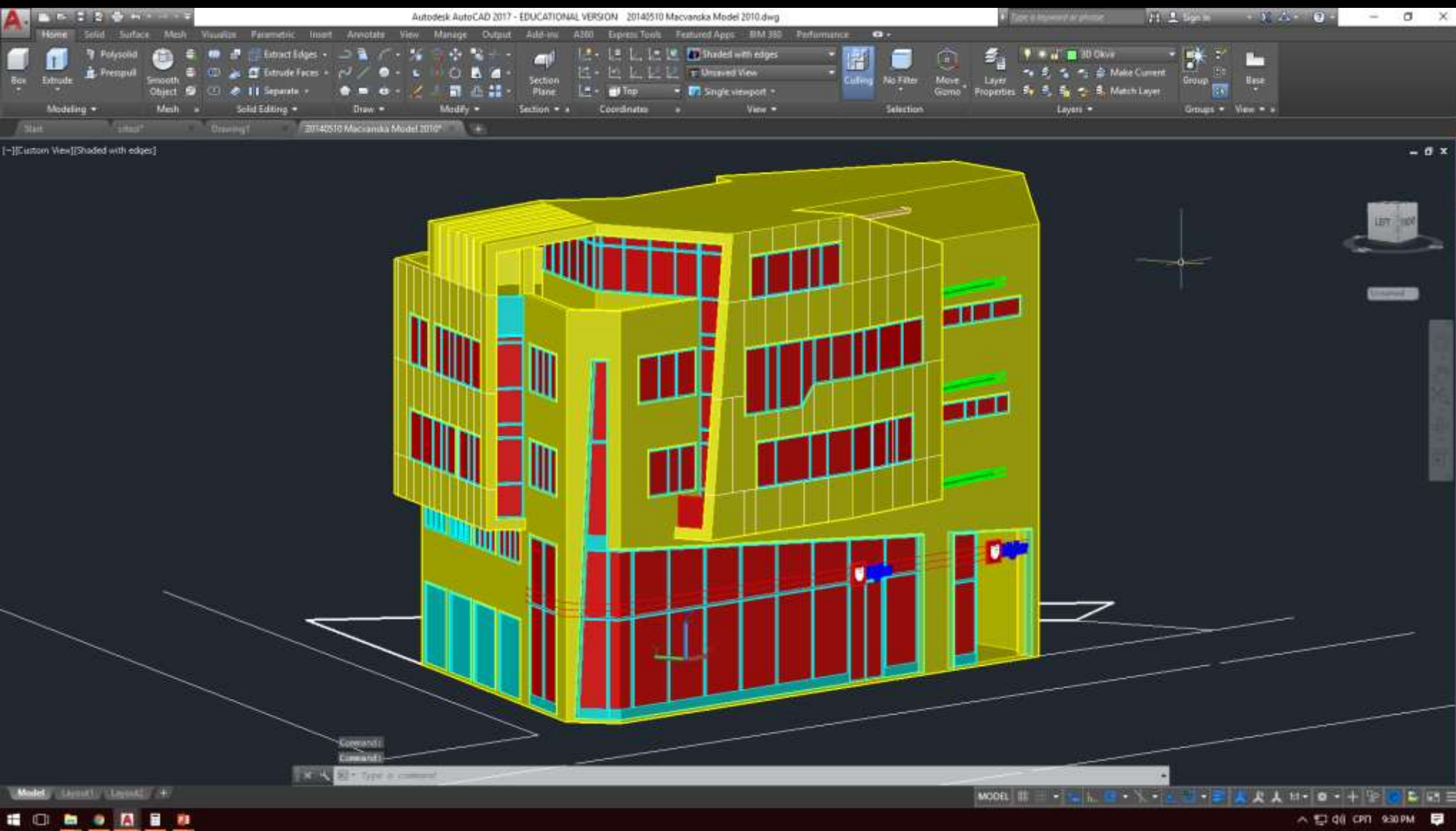








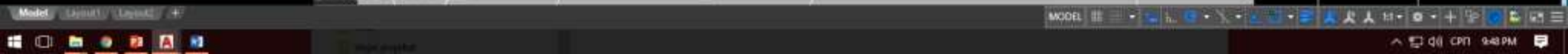
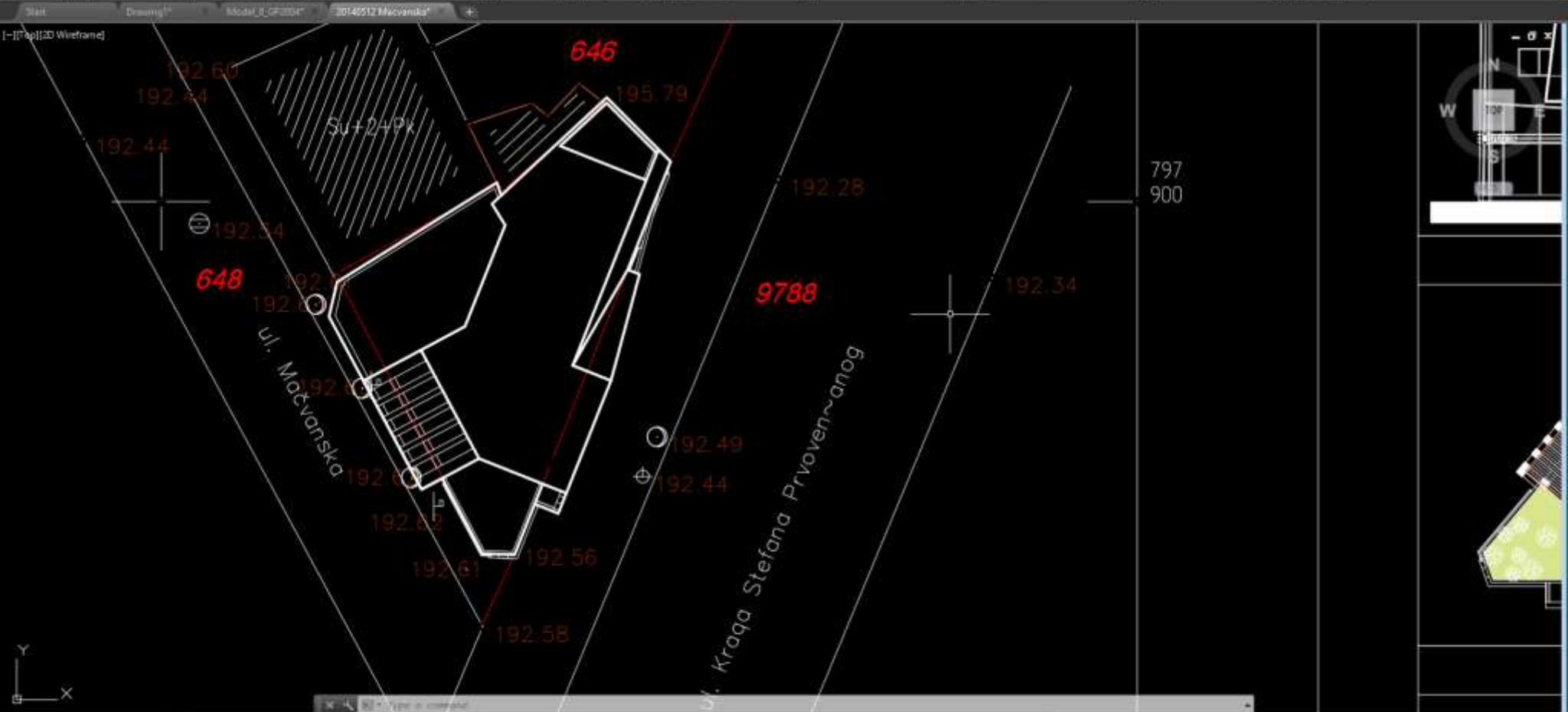






POSLOVNI OBJEKAT NA UGLU ULICE KRALJA STEFANA PRVOVENČANOG I MAČVANSKE ULICE U NIŠU

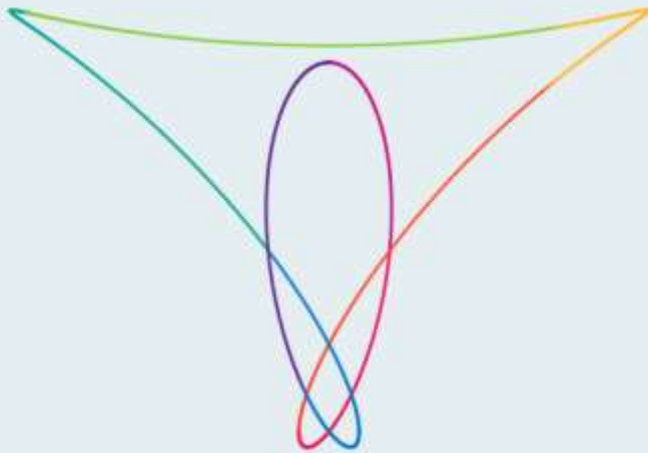




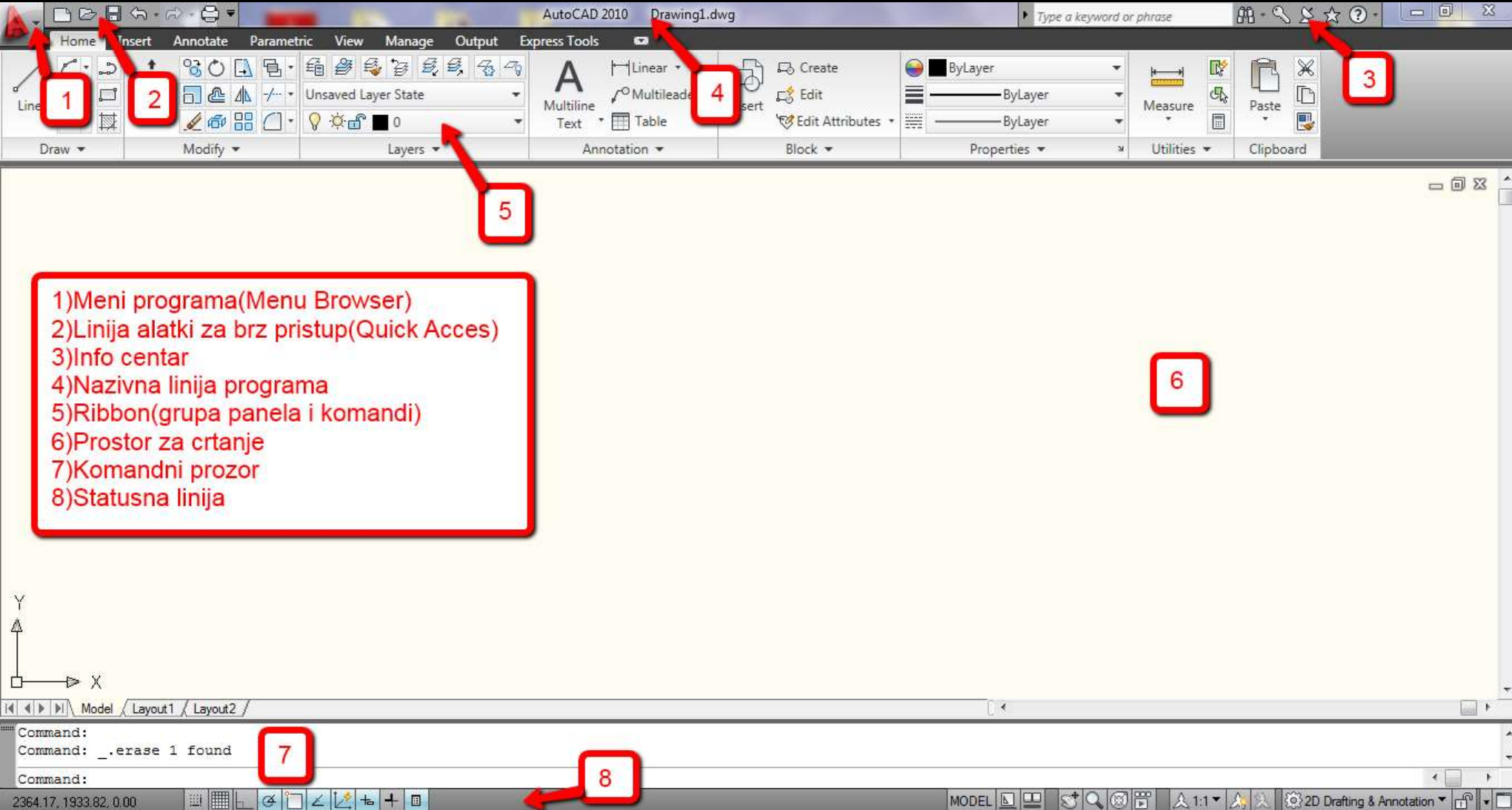


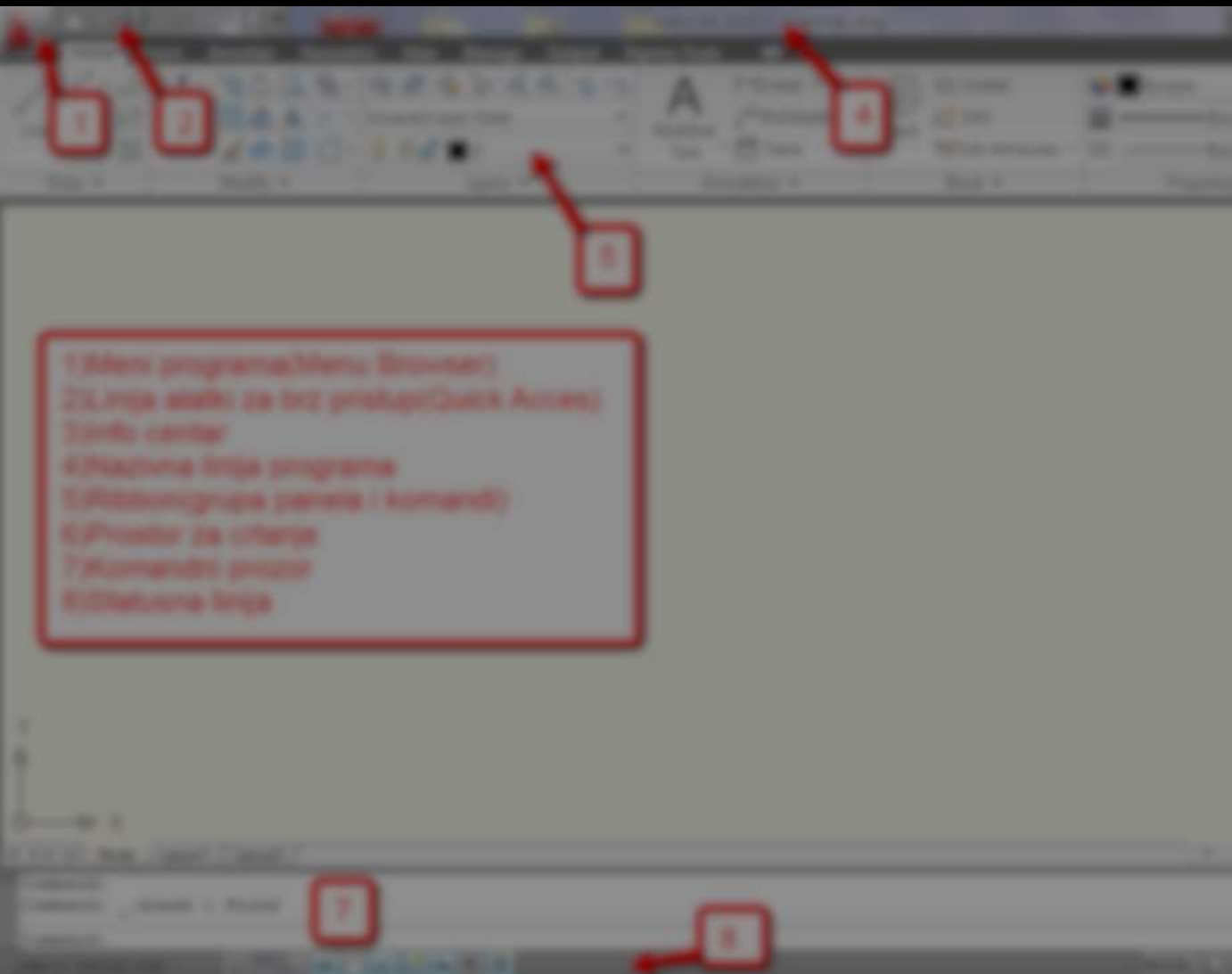
AutoCAD

**Корисничко
окружење**



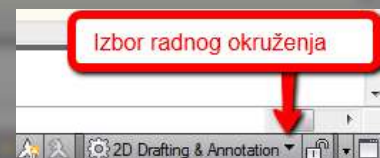
Корисничко окружење AutoCAD-a

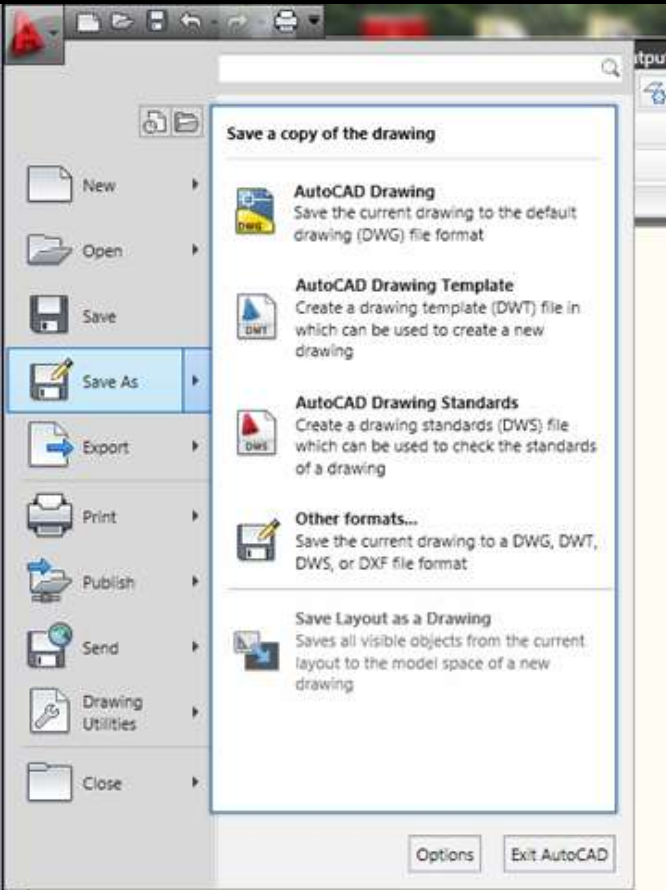




AutoCAD ima tri snimljena radna okruženja:

- 2D Drafting & Annotation
- 3D Basics
- 3D Modeling





1. Menu Browser

2. Linija alatki za brzi pristup

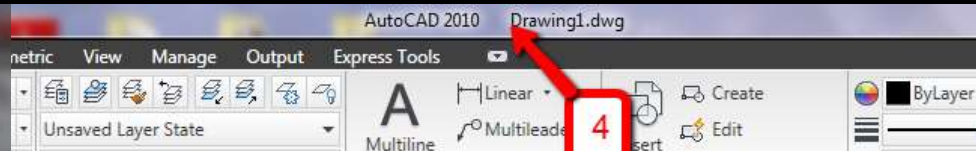
Sadrži najčešće korišćene komande: New, Open, Save...

- 1 Ikona programa
- 2 Linija alatki za brzi pristup
- 3 Ikonica centra
- 4 Interaktivna linija programa
- 5 Ikonica grupe komandi
- 6 Prilagodljivi alat
- 7 Komandni prompt
- 8 Interaktivna linija

3. Info centar

Nudi mogućnost pretraživanja AutoCAD Help fajlova. InfoCenter sastoji se od: **InfoCenter pretrage** i **pristupa Communication Center panelu**. InfoCenter pretragu možete da upotrebite tako što ćete **ukucati ključne reči** ili tako što ćete **ukucati pitanje**. Postoje mnoge lokacije za koje InfoCenter može da bude konfigurisan. Communication Center, kome **pristupate kroz InfoCenter liniju menija**, obezbeđuje obaveštenja u realnom vremenu, objave i novosti na vašem ekranu. Da biste **iskoristili prednosti ove funkcije**, **treba da budete konektovani na Internet**.

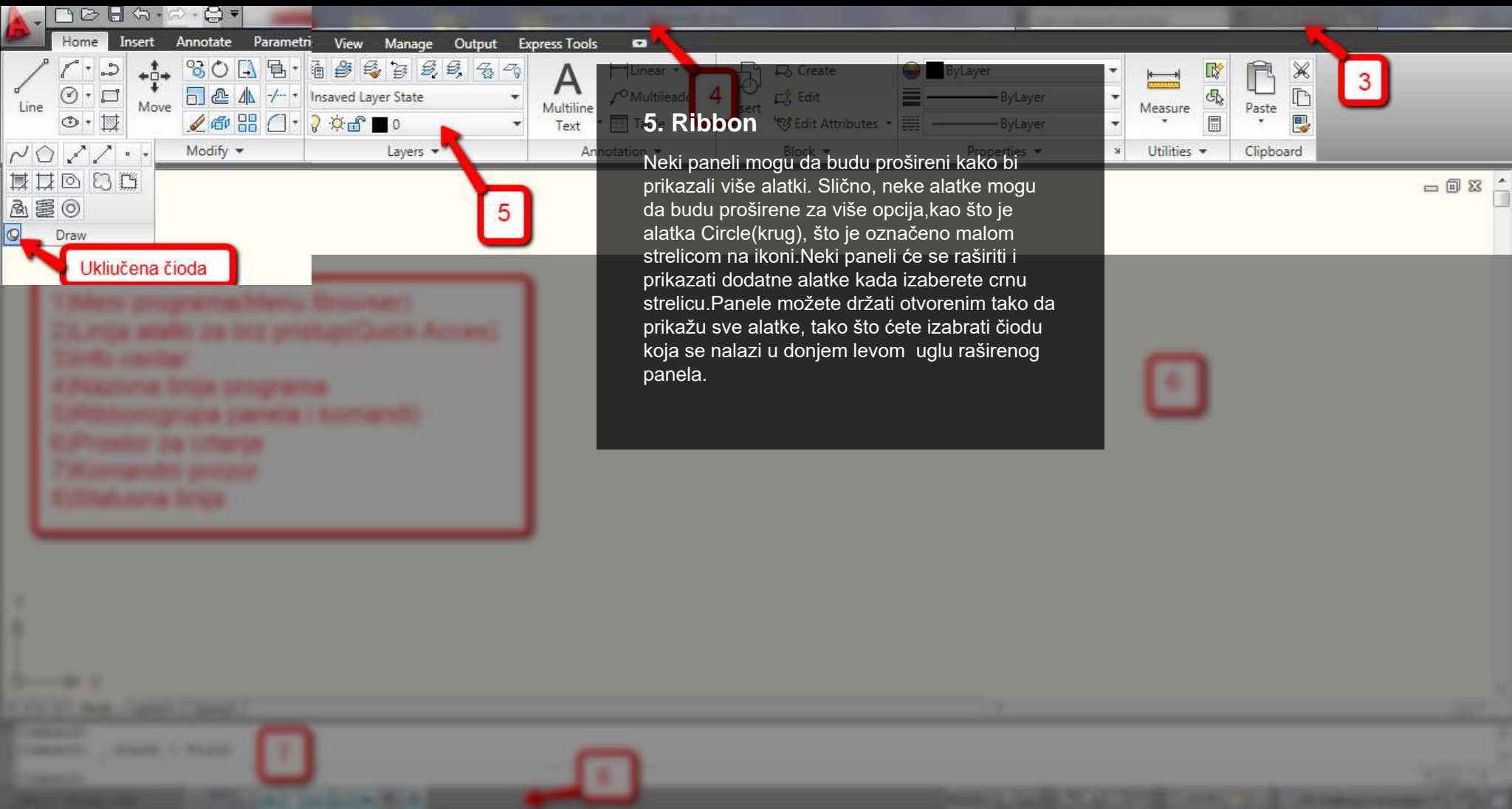




4. Nazivna linija programa

U njoj se nalazi ime programa i ime aktivnog crteža. Ekstenzija fajla je .dwg (skraćenica od drawing).

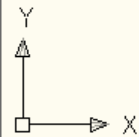
- 1) Ikona programa (Menu Browser)
- 2) Linija alata za brz pristup (Quick Access Toolbar)
- 3) Ikonice centar
- 4) Nazivna linija programa
- 5) Grupa panela i komandi
- 6) Prostor za crtanje
- 7) Komandni prostor
- 8) Statusna linija



6. Prostor za crtanje

Prostor modela (kartica Model) jeste oblast gde kreirate svoje projekte. Kada projektujete, trebalo bi uvek da crtate u razmeri 1:1. Prostor modela je neograničen. Kursor (pokazivač pozicije miša) u AutoCAD-u zove se končanica.

6



7. Komandni prozor

Obezbeđuje saradnju korisnika sa programom. U komandnoj liniji piše šta vi treba da uradite da bi se komanda izvršila. U svakoj fazi rada sa komandom, program vam obezbeđuje niz opcija koje ćete izabrati ili od vas zahteva da unesete vrednosti koje odgovaraju fazi postupka. U normalnom radu, komandni prozor sadrži tri linije teksta. Prve dve linije prikazuju neposrednu istoriju komande i prikazuju podešavanja ili opcije dostupne unutar tekuće komande. Donja linija je komandna linija. Tu bi trebalo da usredsredite svoju pažnju za vreme izvršavanja većine komandi.

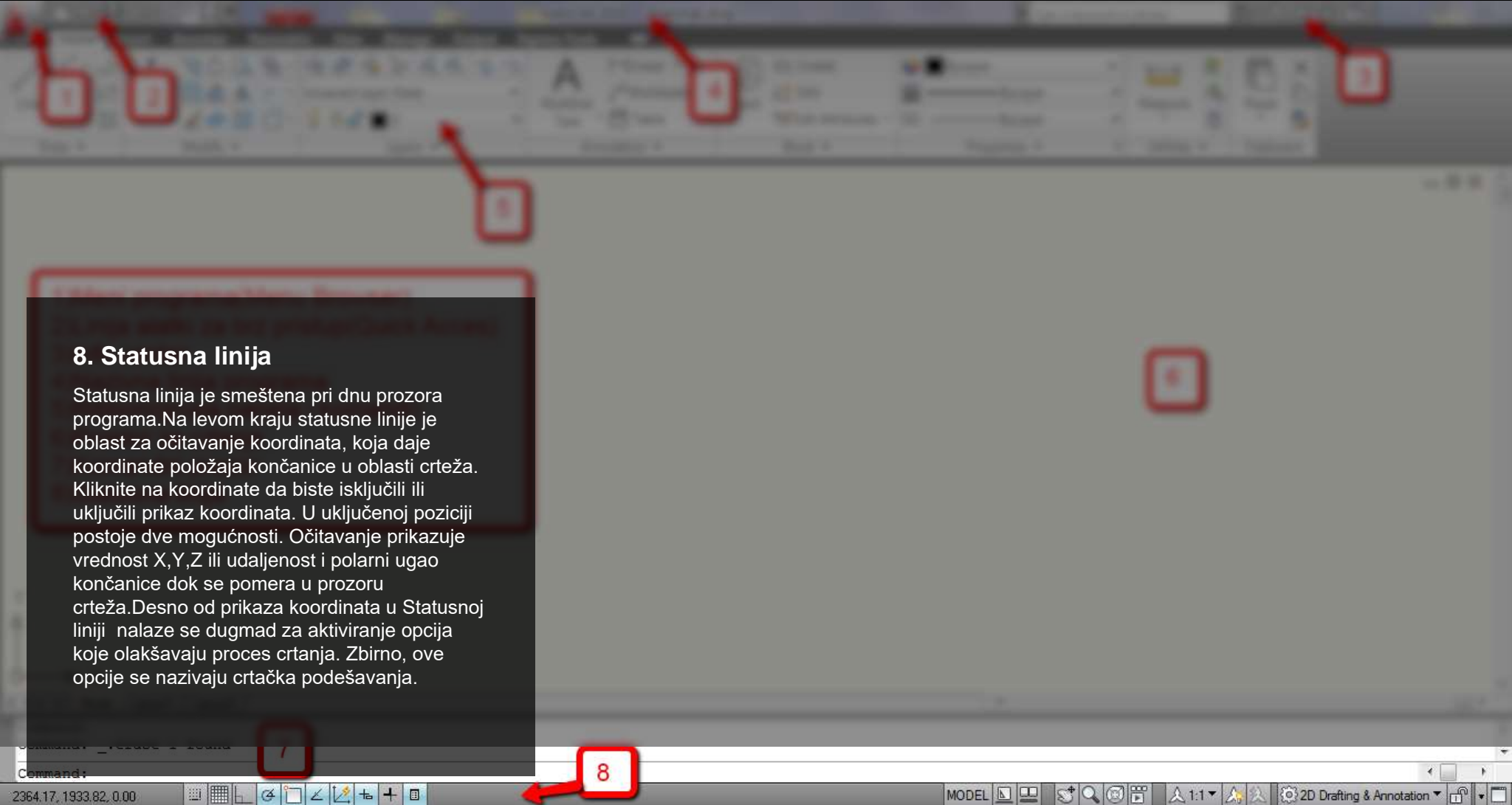
```
Command:  
Command: _erase 1 found  
Command:
```

7

8

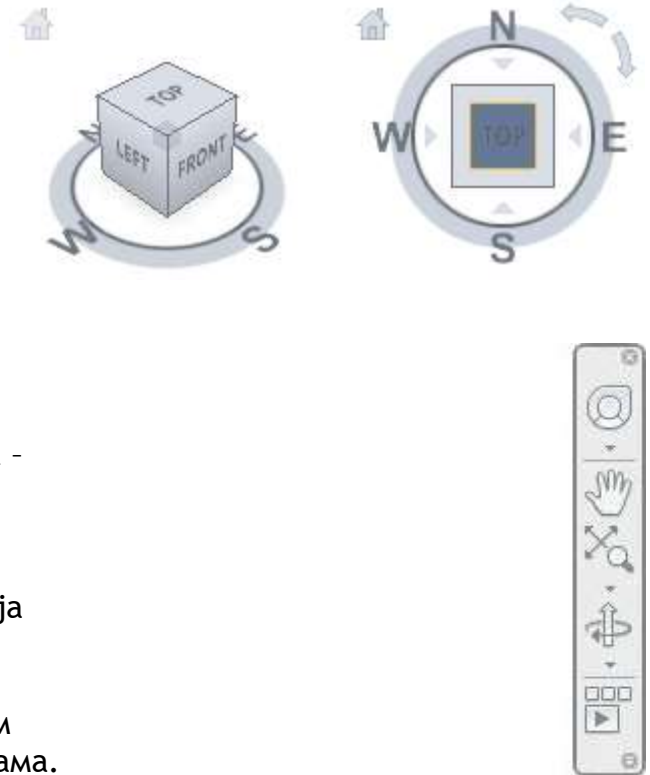
8. Statusna linija

Statusna linija je smeštena pri dnu prozora programa. Na levom kraju statusne linije je oblast za očitavanje koordinata, koja daje koordinate položaja končanice u oblasti crteža. Kliknite na koordinate da biste isključili ili uključili prikaz koordinata. U uključenoj poziciji postoje dve mogućnosti. Očitavanje prikazuje vrednost X,Y,Z ili udaljenost i polarni ugao končanice dok se pomera u prozoru crteža. Desno od prikaza koordinata u Statusnoj liniji nalaze se dugmad za aktiviranje opcija koje olakšavaju proces crtanja. Zbirno, ove opcije se nazivaju crtačka podešavanja.



- 1) Snap - režim rada koji primorava kursor da se pomera skokovito
- 2) Grid - kao pozadinu postavlja koordinatnu mrežu radi lakšeg crtanja
- 3) Ortho - režim rada u kome crtamo samo u horizontalnom i vertikalnom pravcu
- 4) Polar - režim rada u kome se kursor pomera u pravcu definisanih uglova
- 5) Osnap - pomaže da precizno pronadjemo tačke na crtežu
- 6) Otrack - pokazuje tačkaste putanje objekta i olakšava crtanje
- 7) Dynamic UCS ubrzava 3D crtanje jer automatski menja radnu ravan
- 8) Dynamic Input - omogućava da se sadržaj komandne linije pojavljuje i pored končanice
- 9) LWT - Lineweight prikazivanje pravih debljina linija na ekranu
- 10) Quick Properties omogućava pregled i modifikovanje karakteristika objekata

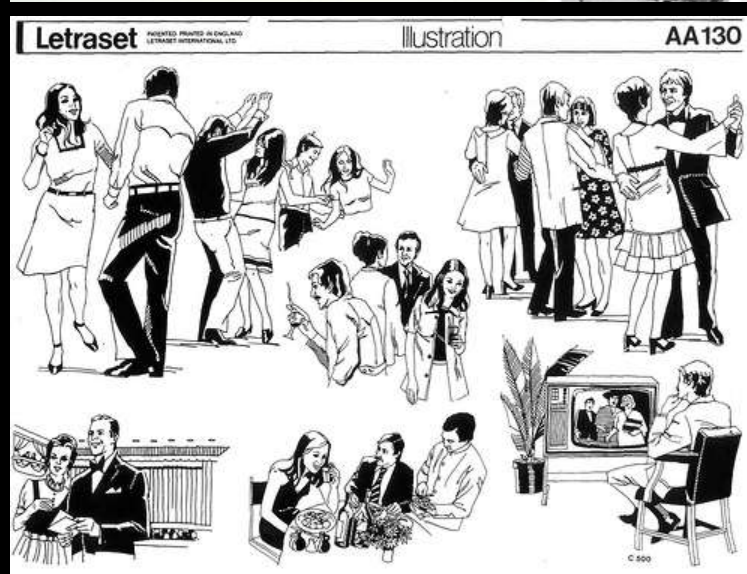
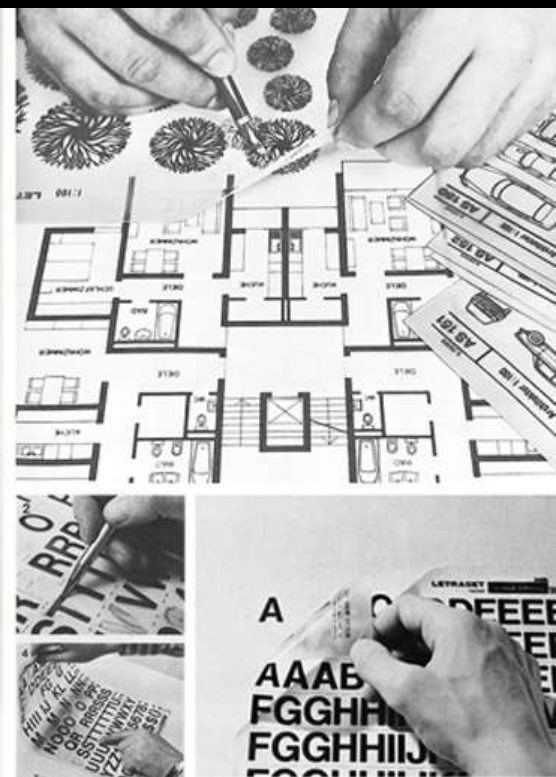
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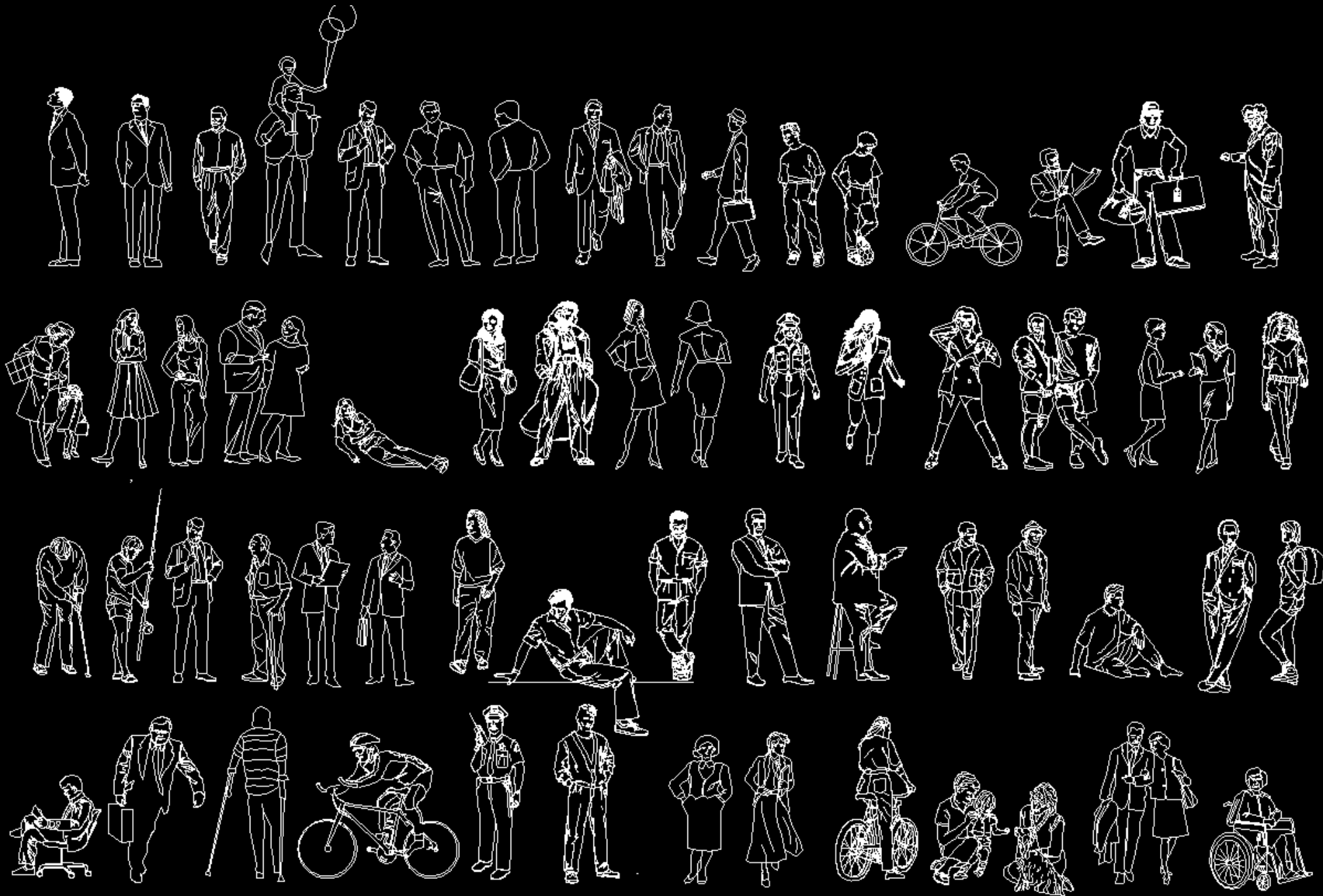
За основну навигацију у простору цртежа довољне су команде миша - скрол точић служи за зумирање, а клик скрол точићем активира опцију PAN.

За основну навигацију у 3Д простору додатно се користи комбинација тастера SHIFT и клика скрол точићем, која активира опцију ORBIT.

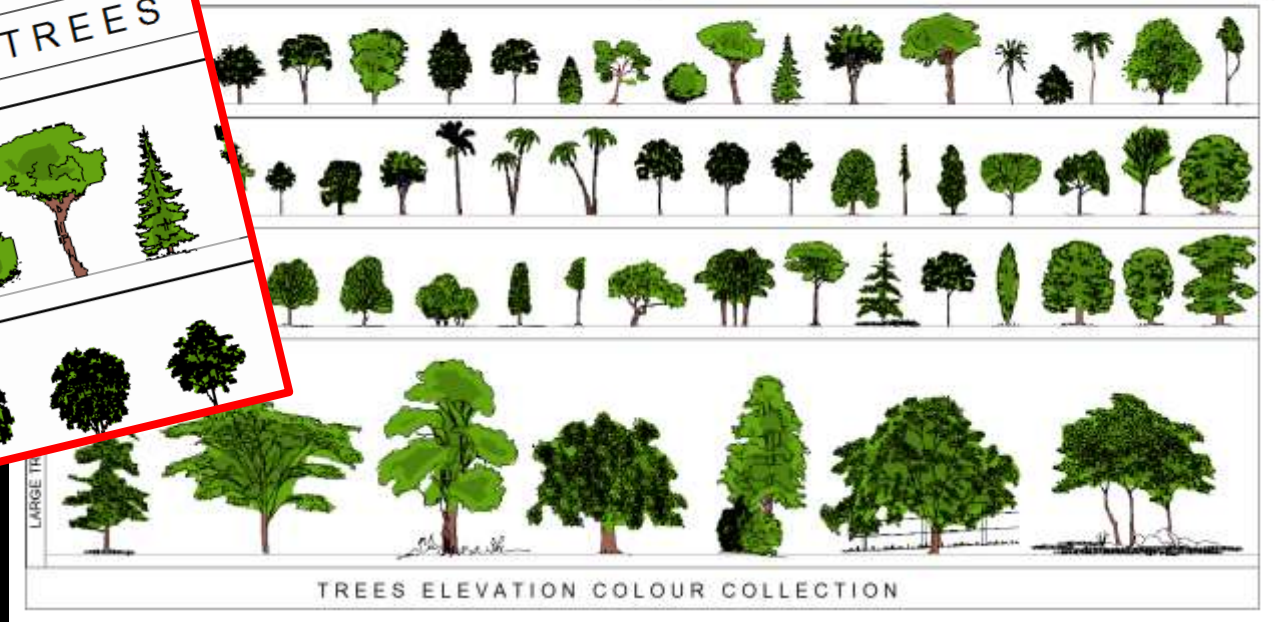
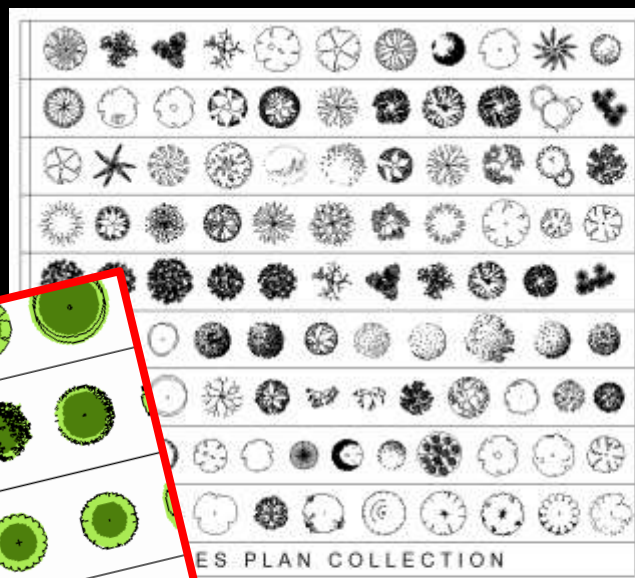
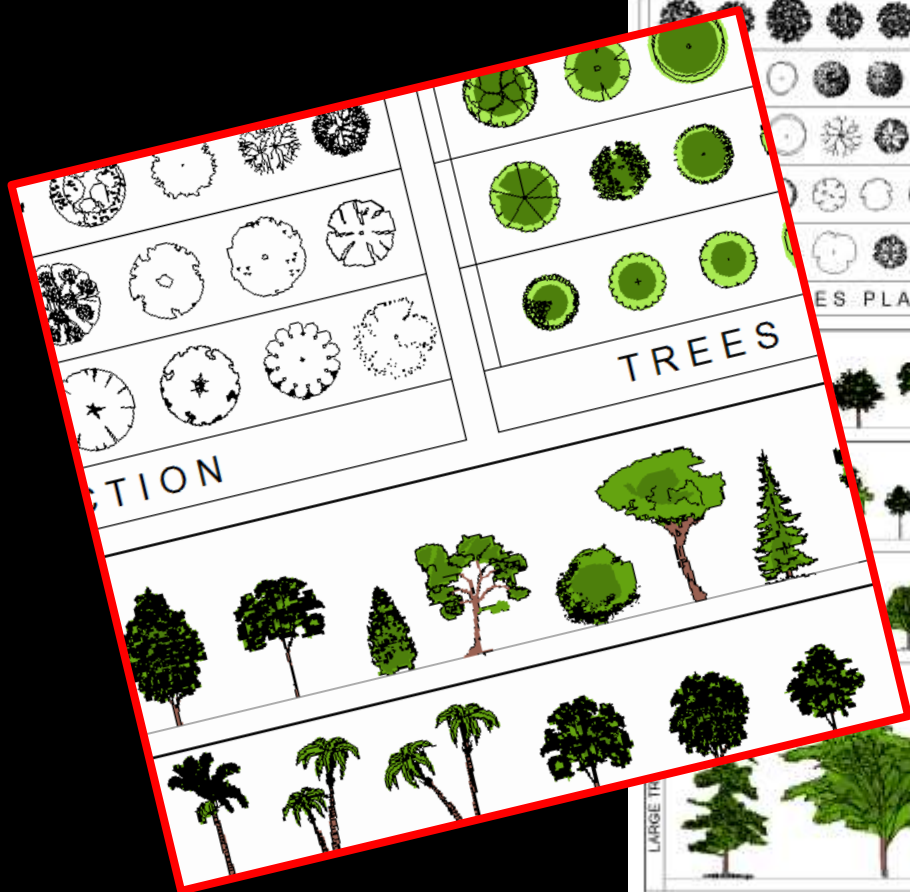
Навигациона коцка и алати за навигацију налазе се у горњем десном углу радне површине. Могуће их је прилагодити сопственим потребама.

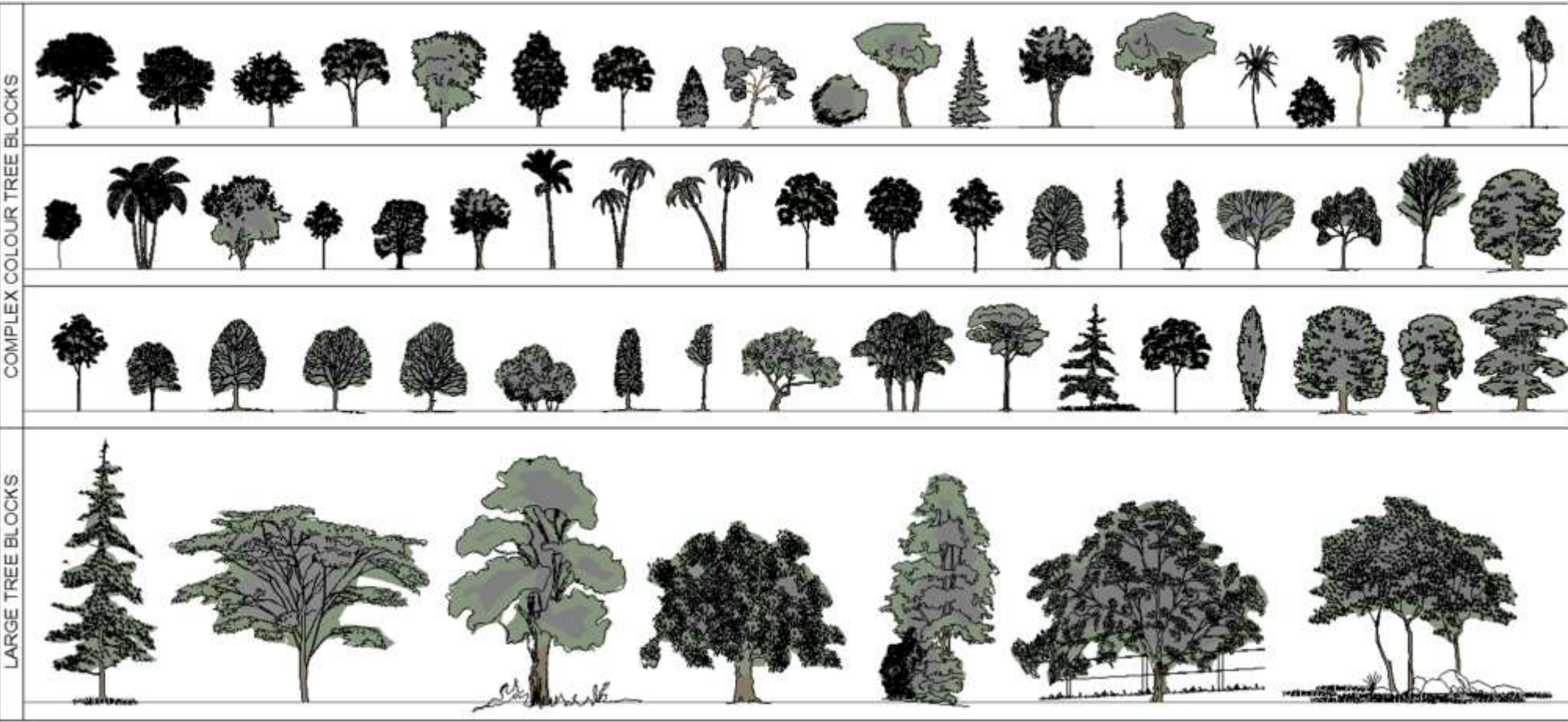


**.dwg
blocks**



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SOFAS AND ARMCHAIRS ELEVATION VIEW</p>		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SOFAS AND ARMCHAIRS LAYOUT DESIGNS</p>		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SOFAS AND ARMCHAIRS PLAN VIEW</p>		





AutoCAD Apps



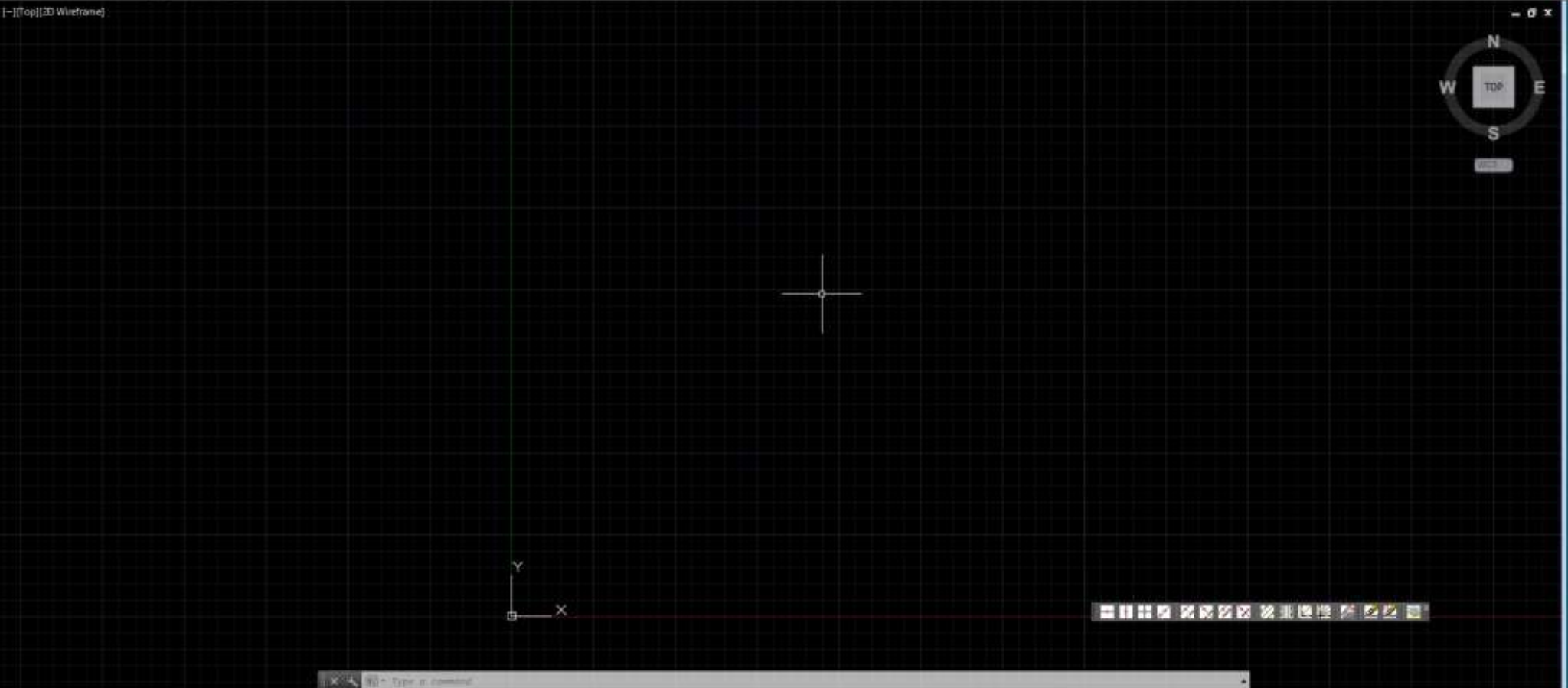
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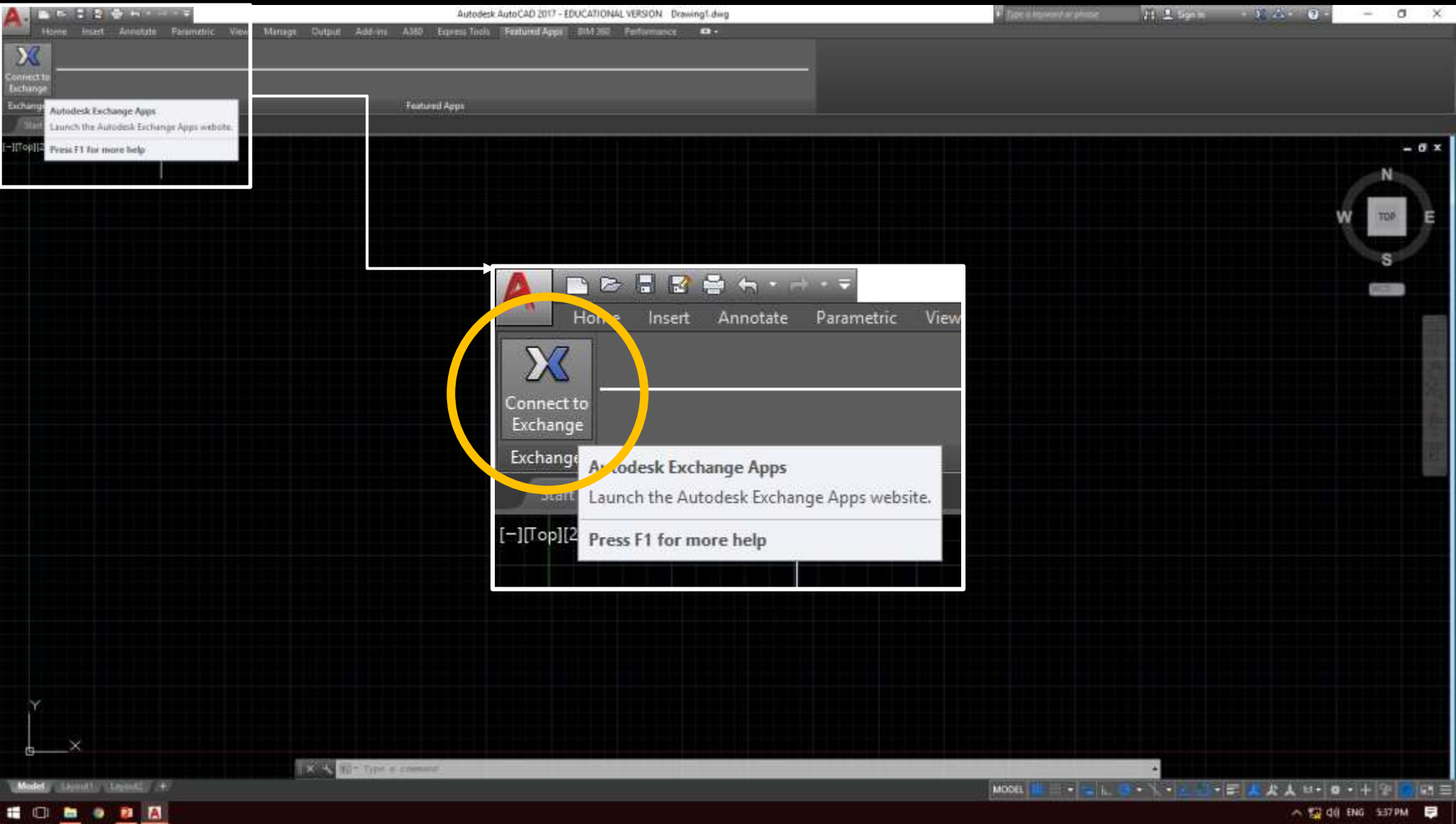
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- BLI - Autodesk
- Renumber vertices polyline - AK-Force2

Start Drawing1*



Model: Layer1, Layer2, ...





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RenameBlocks ★★★★☆ (0) USD 15.00	TEXT TRACK - Create Text Along Objects ★★★★☆ (0) Trial	TEXTCOPYPASTE ★★★★☆ (0) USD 1.00	BOMSuite.ATT ★★★★☆ (0) Trial
JTB Steel Trial ★★★★☆ (0) Trial	Renumber vertices polyline ★★★★☆ (0) Free	BLI ★★★★☆ (1) Free	STSC_Projective2D ★★★★☆ (1) Free

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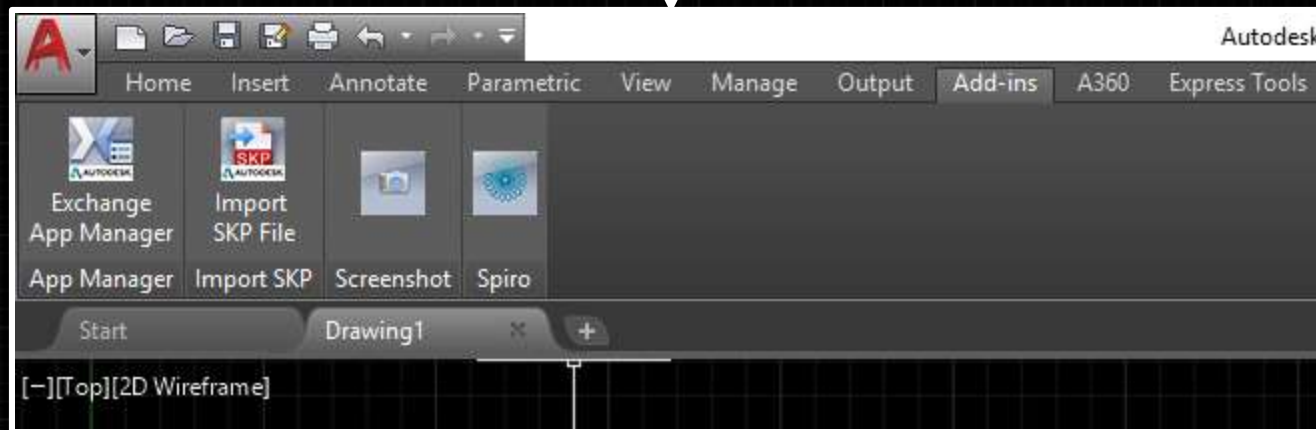
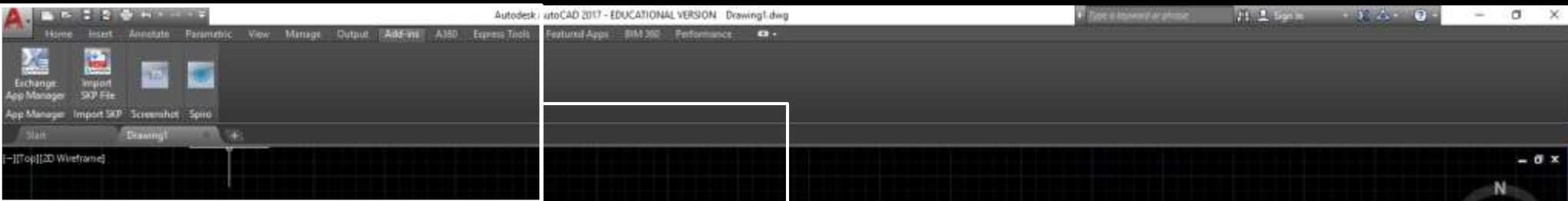
Autodesk FB... ★★★★☆ (17) Free	Drawing Purge ★★★★☆ (131) Free	SketchUp Im... ★★★★☆ (18) Free
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Most Popular Paid Apps

AutoRebar ★★★★☆ (0) USD 112.00	Dike ★★★★☆ (2) USD 3.00	3D PDF Expr... ★★★★☆ (1) USD 99.00
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Featured New Apps

JoinLayers ★★★★☆ (1) Trial	Mplot Trial ★★★★☆ (0) Trial	SonOfABatch ★★★★☆ (0) Free	Commutation Panel... ★★★★☆ (0) Free	Cad Standard ★★★★☆ (2) USD 20.00
Property Selection ★★★★☆ (0) Free	3D Printing App for ... ★★★★☆ (4) Free	PVCAD - Win 64 ★★★★☆ (2) Trial	ATX-CellSuite ★★★★☆ (0) Trial	maxdAttrEditor2Map ★★★★☆ (0) USD 299.00

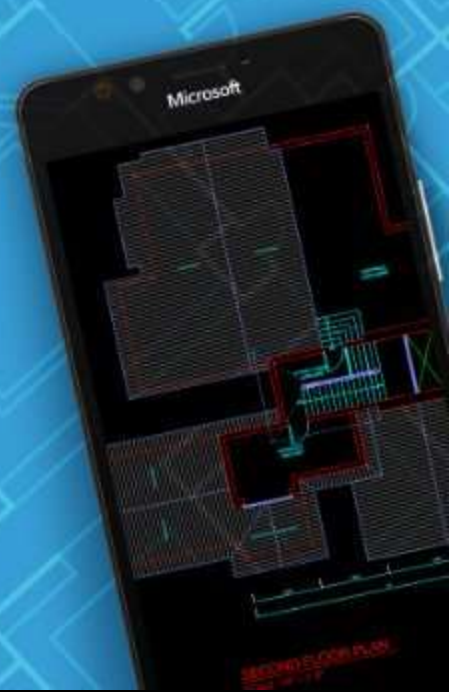


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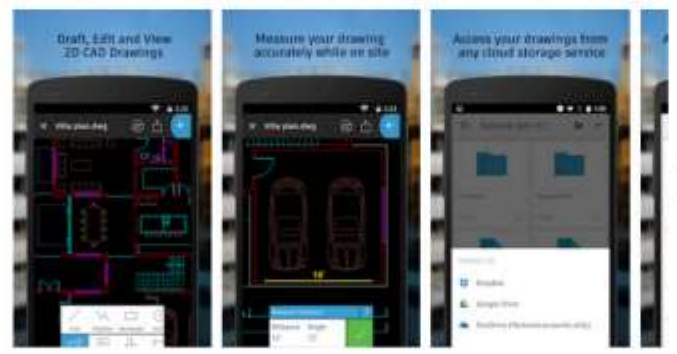
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