

NAVEENA-2025  
THUNAI-COMPANION

GUIDED:PRAVIN SOLANKI





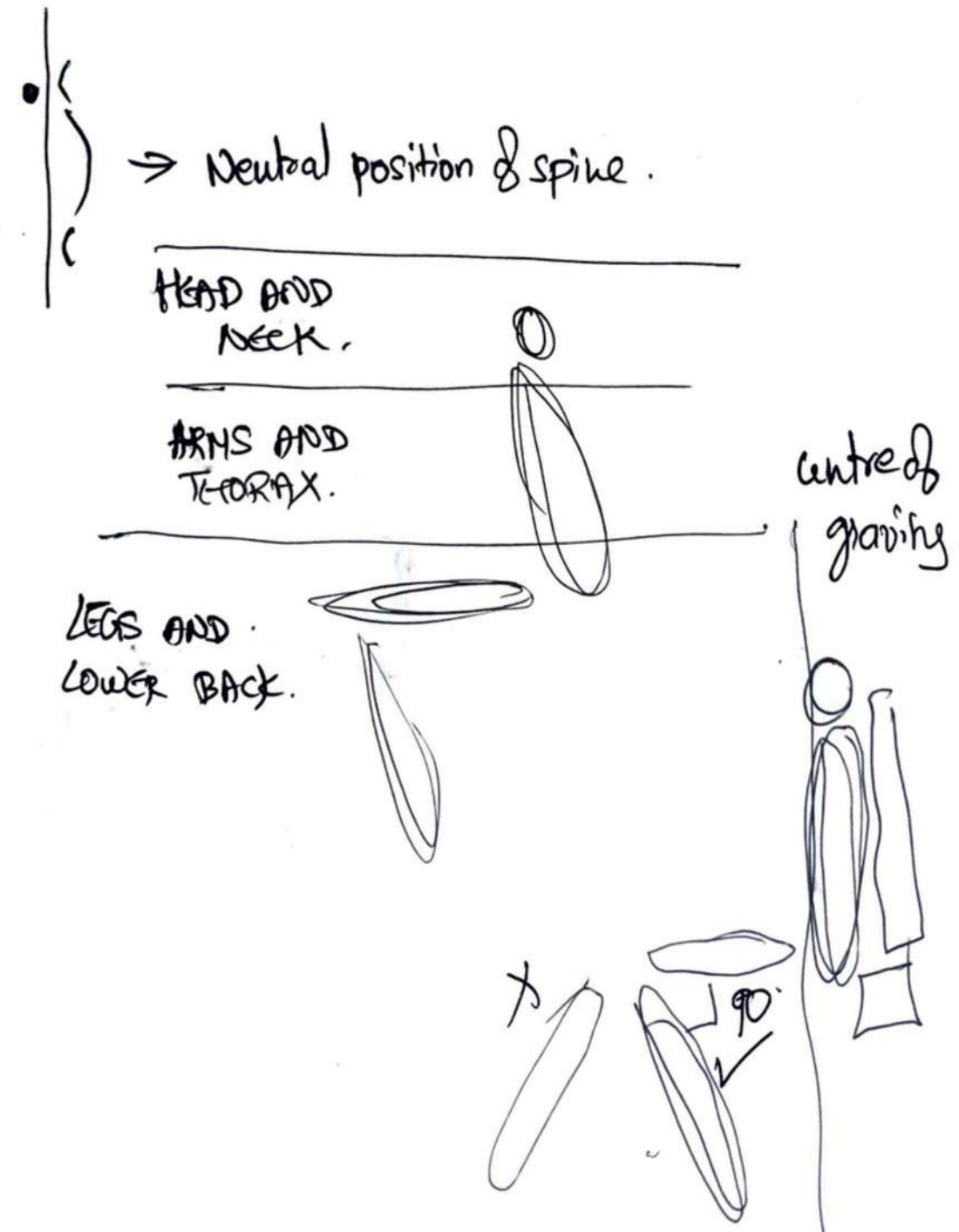
# SITTING POSTURE

## UNDERSTANDING ERGONOMICS

I had viewed several videos to gather data about what is the ideal sitting position.

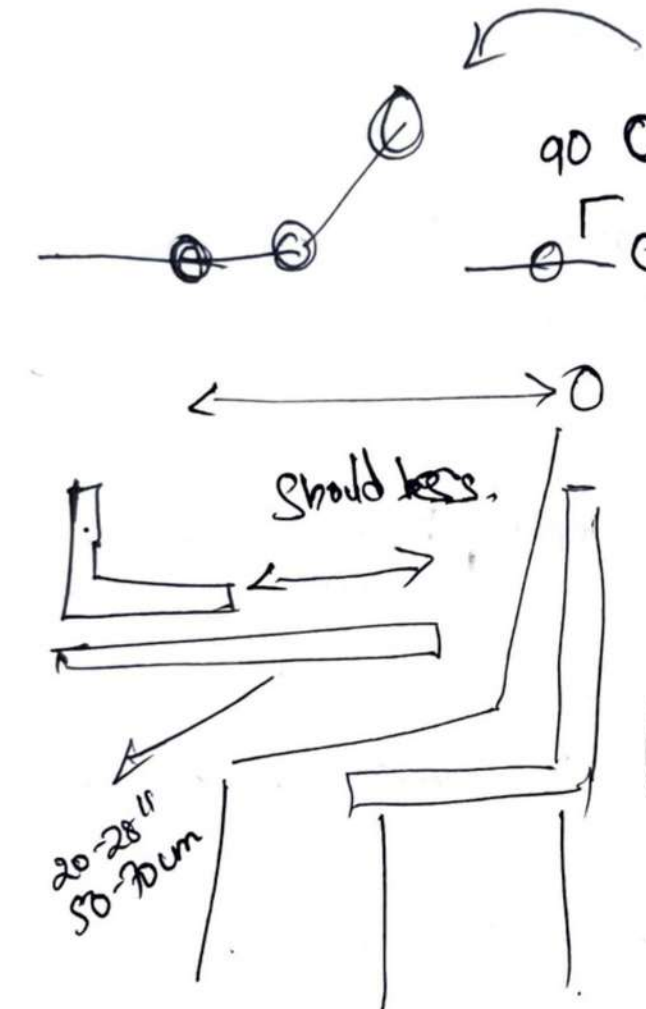
THE ERGONOMIC POSITION.  
→ HOLD FOR LONG HOURS.  
→ MINIMUM EFFORTS.

LEAST STRESSFUL POSITION.



→ Support abdominal ~~area~~

ARMS AND THORAX.



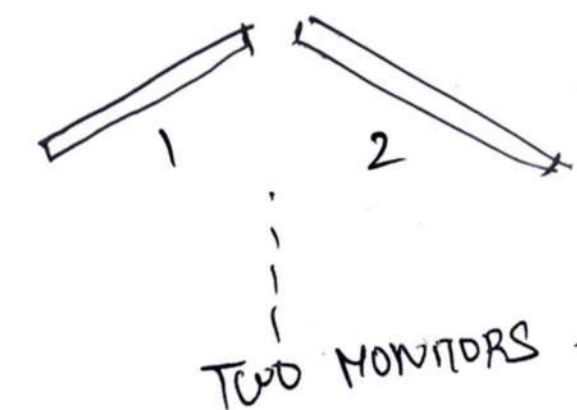
further your shoulder goes away from 90. More support needed from shoulder.

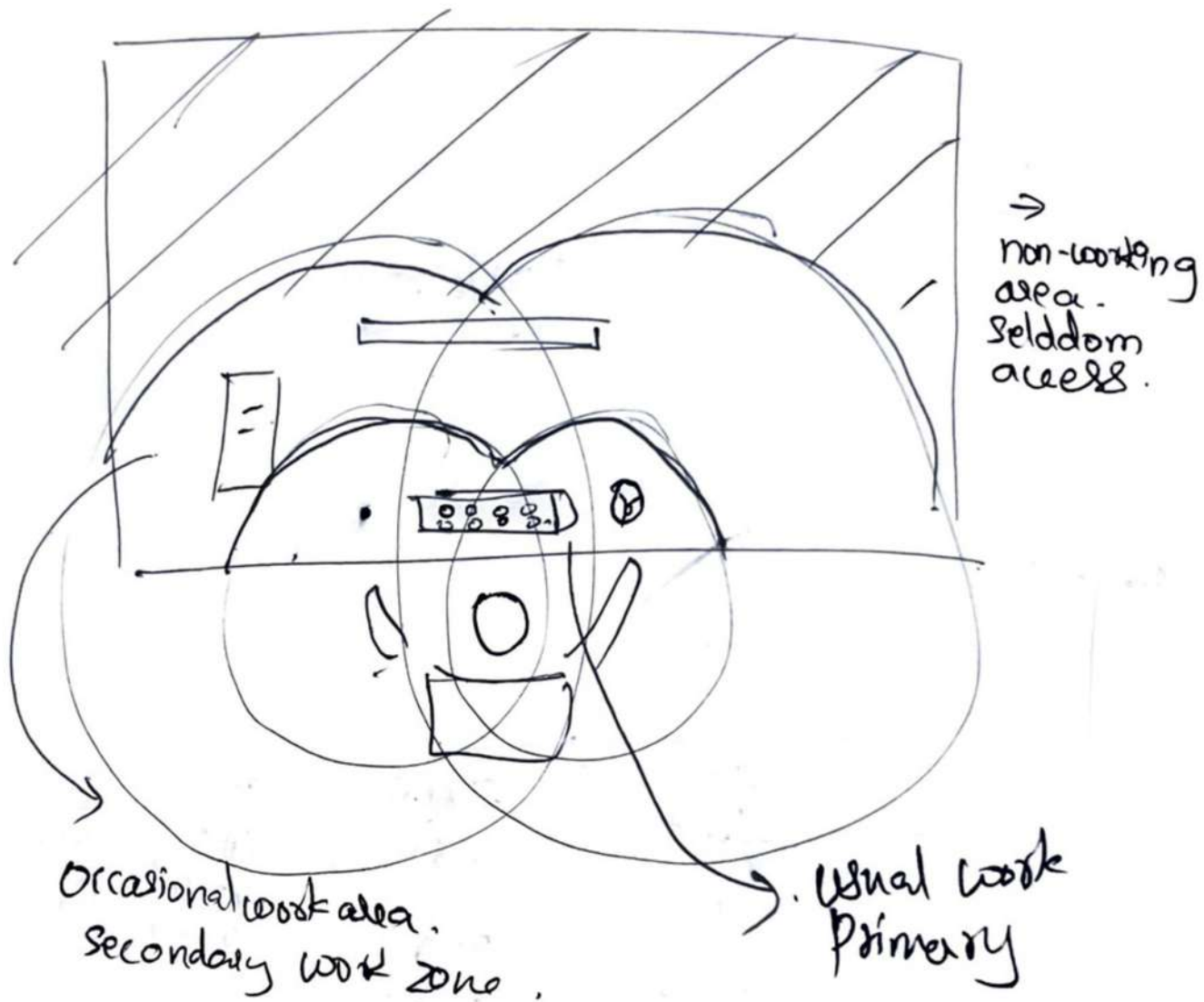
→ Screen should be eye level.



No posture is good for all day.

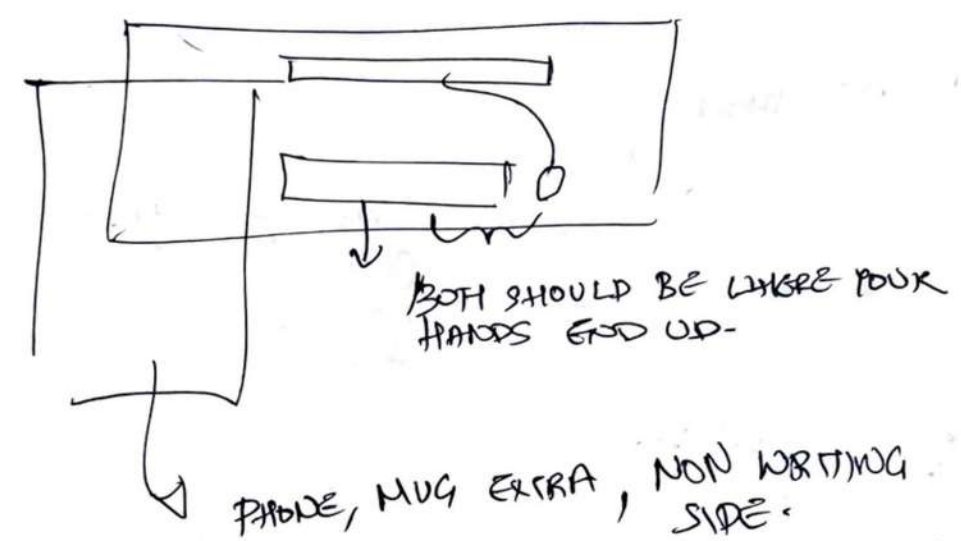
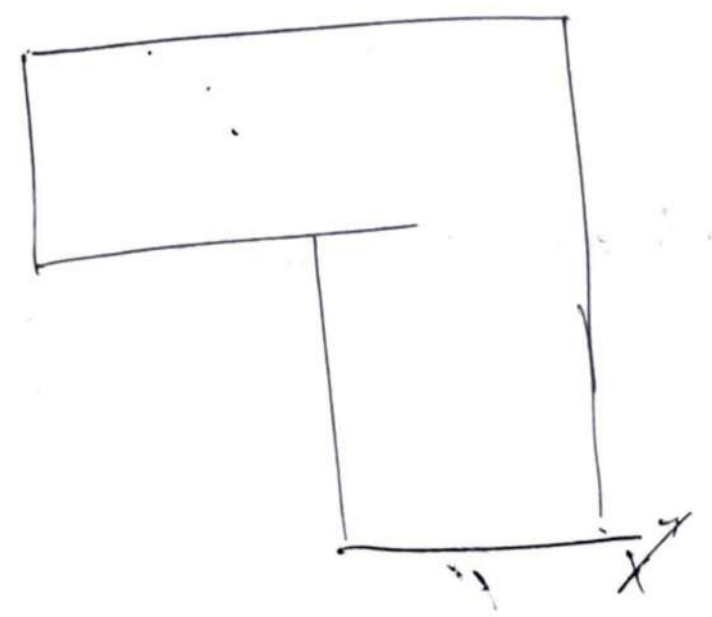
Avg DESK HEIGHT - 29-30" → Elbow 90'  
For PERSON WHOSES LEGS DONT TOUCH, PUT FOOTREST.





5-5'5

5- ASK SEATED

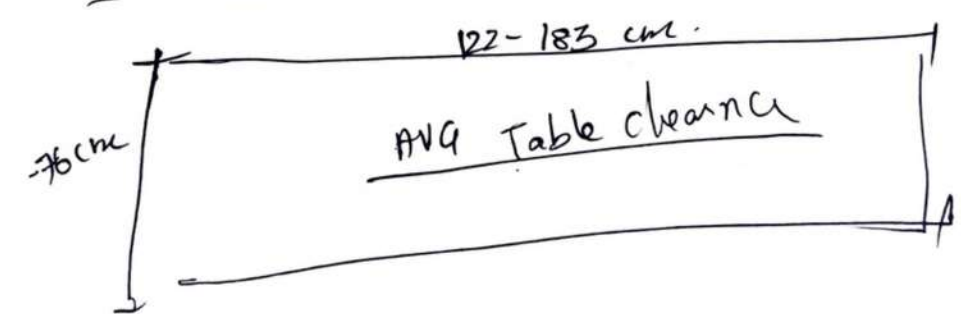


Spanio - bhavati.

AVG - INDIAN HEIGHT - 5 feet 5 inches.

5 feet 8 inches. 5 feet.

5 → 5'8 / 5'5.



# CLEARANCE

## USAGE AND MOVEMENT ON A TABLE

understanding important terms like primary usage space and seldom access space of a table



Interview - 18 - Rizwana & Kavyan

Yes, Yes.

meant to only work.

Not collapsible | Yes collapsible / Space saving

No space issues

always in home | bought for herself herself

~~need a better desk~~ | need a better desk.

comfortable

function | function -

mid seating | mid seating -

2-3k | 4-5k.



# GOAL

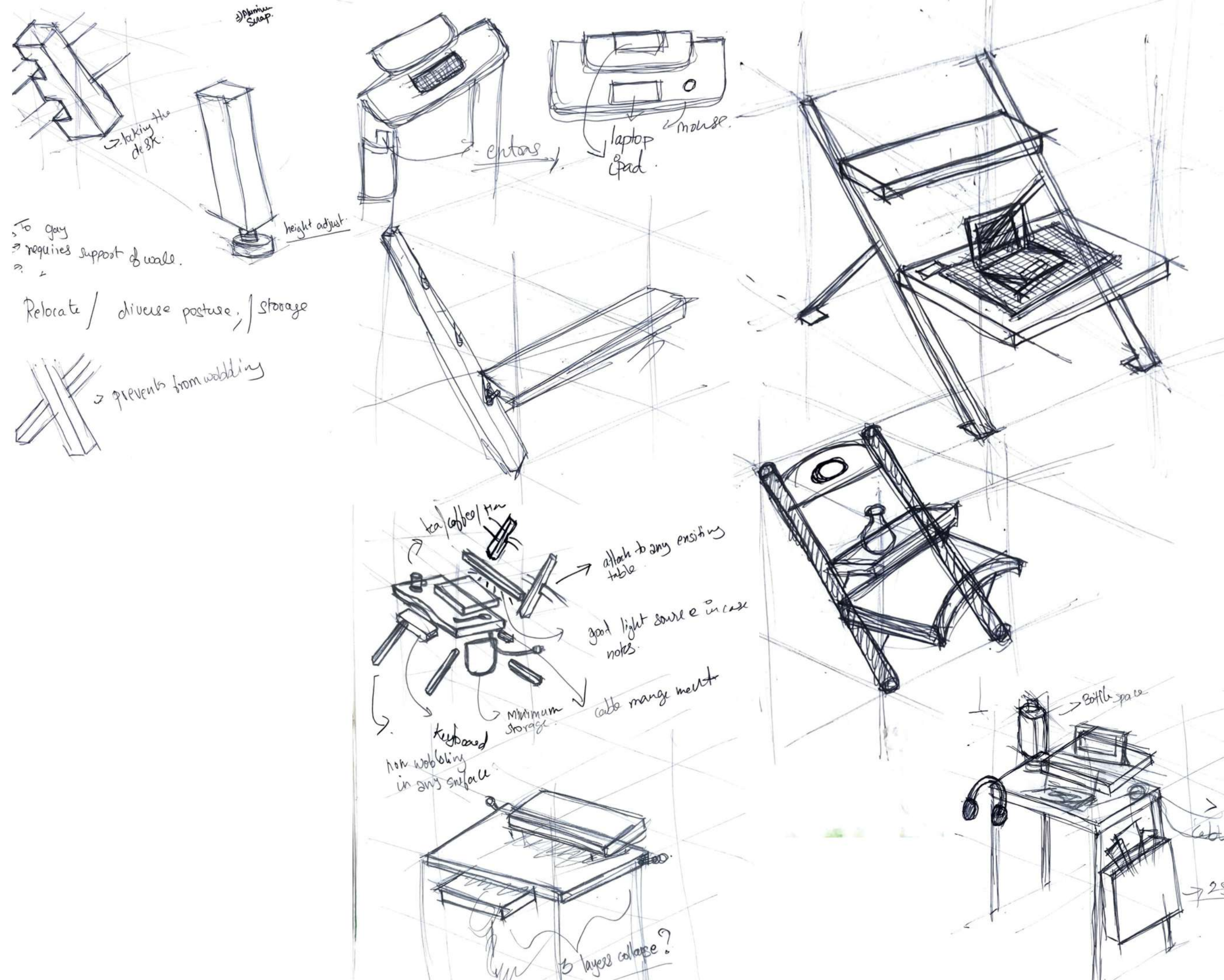
## COLLAPSIBLE LAPTOP STAND

After taking interviews of people and research I listed down the main points i would want to include to my work stand.



# INITIAL IDEATION SKETCHES

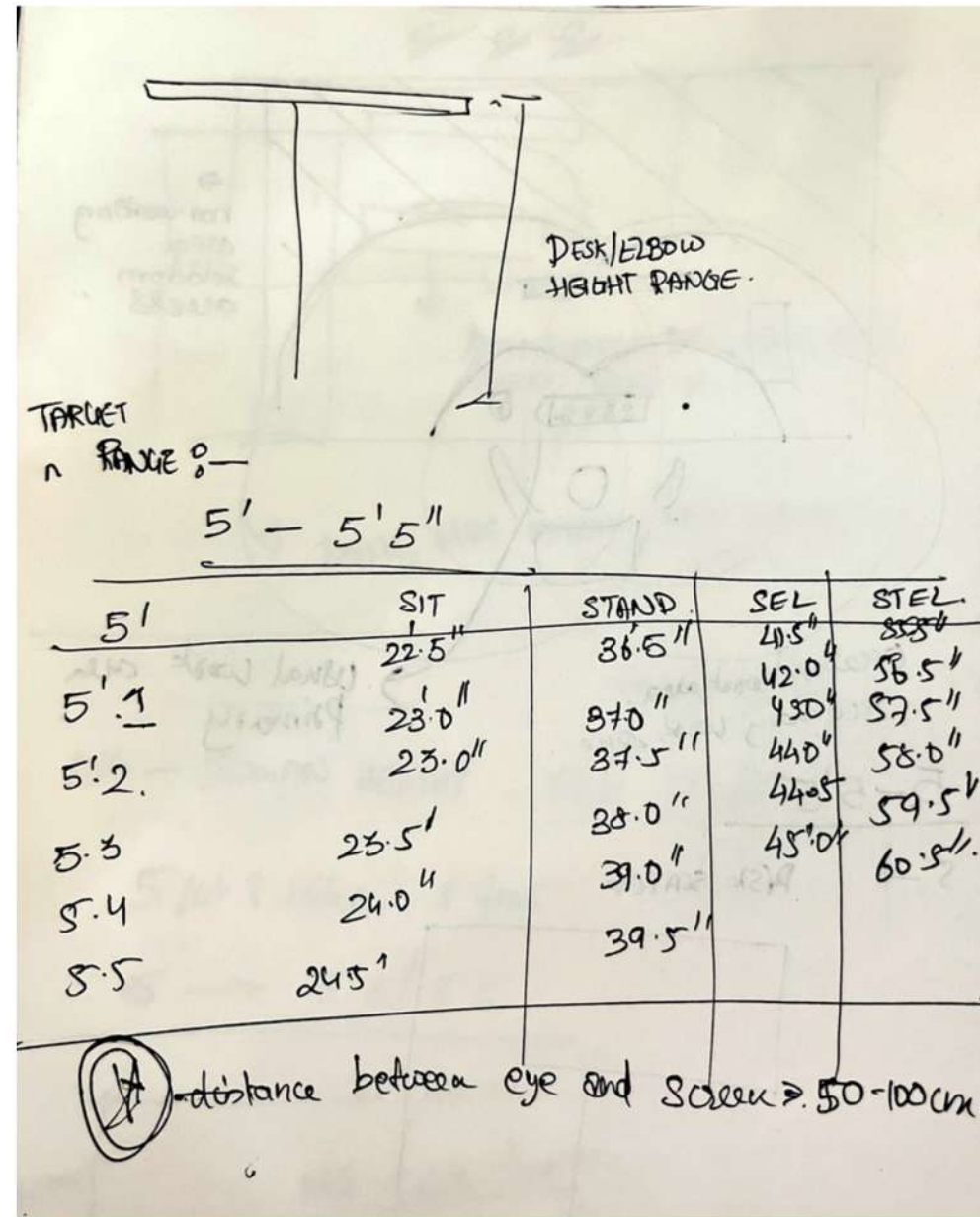
considering my  
requirements I made a  
few sketches of a wall  
lean desk





# DIMENSIONS

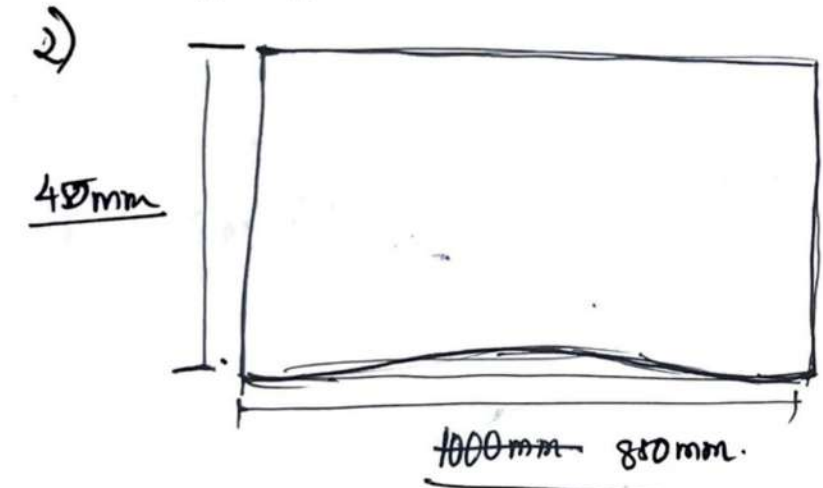
understanding dimensions of average laptop dimensions and required table height



- adaptability
- furniture - various config.
- Quality over quantity.
- Minimal, stick to essentials.
- carry workplace culture wherever.

## DIMENSIONS.

1) Feet of legs should be minimum 40cm from wall



3) Seating for  
 $5'1 - 5'5 = 22.5'' - 24.5'' - 23.5''$   
 Standing for  
 $36.6'' - 39.5''$   
~~76cm 75cm~~

100 cm - 15" 50" } -2'



# PVC PROTOTYPE-1

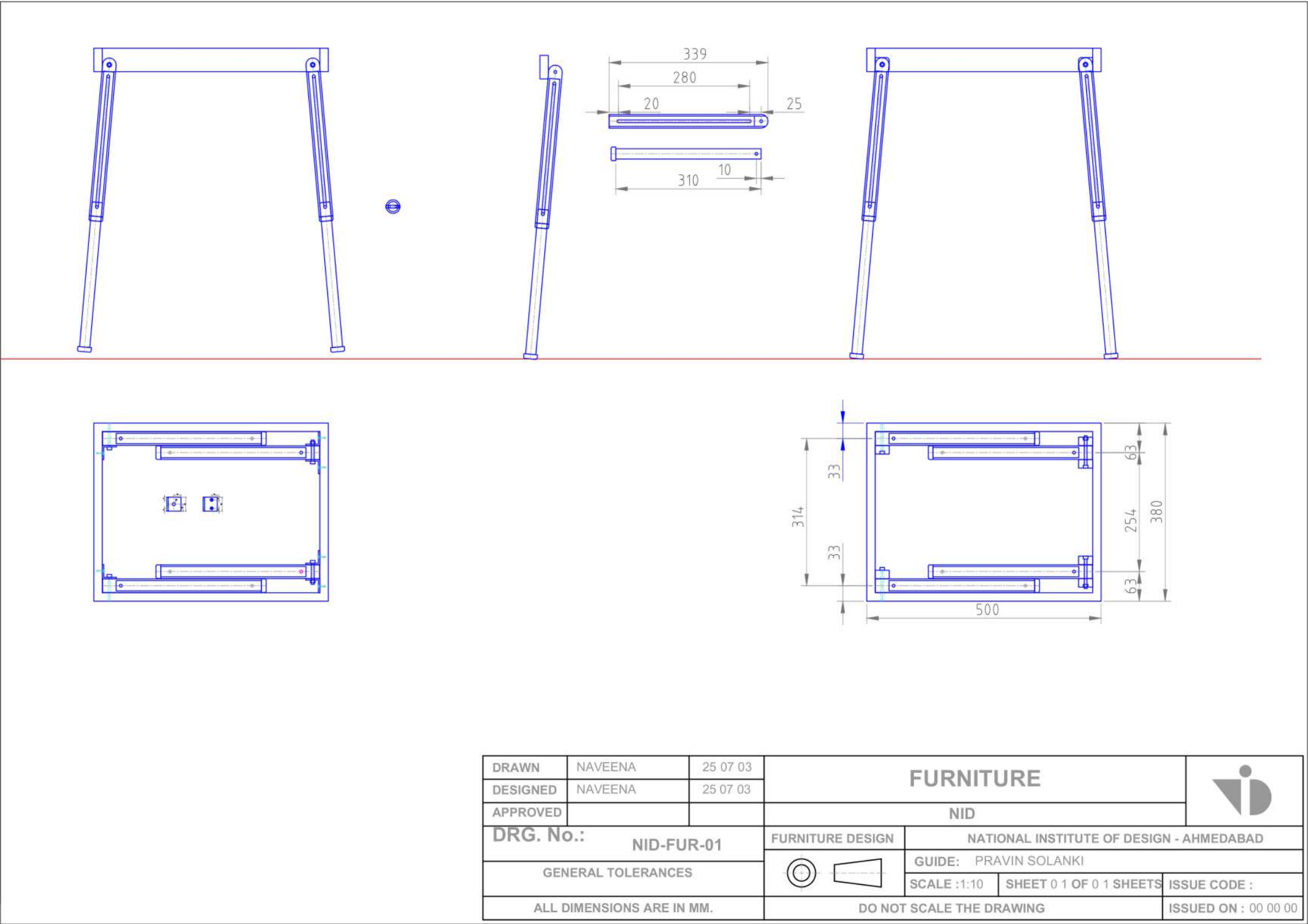
## WORKING TABLE

I made a low fidelity table to try and test out how the table could fold into a slim bag.





WORKING DRAWING 1







Though this prototype ws stable enough opening four legs each at time was inconvenient.so I made further changes in the design reducing the numbver of members

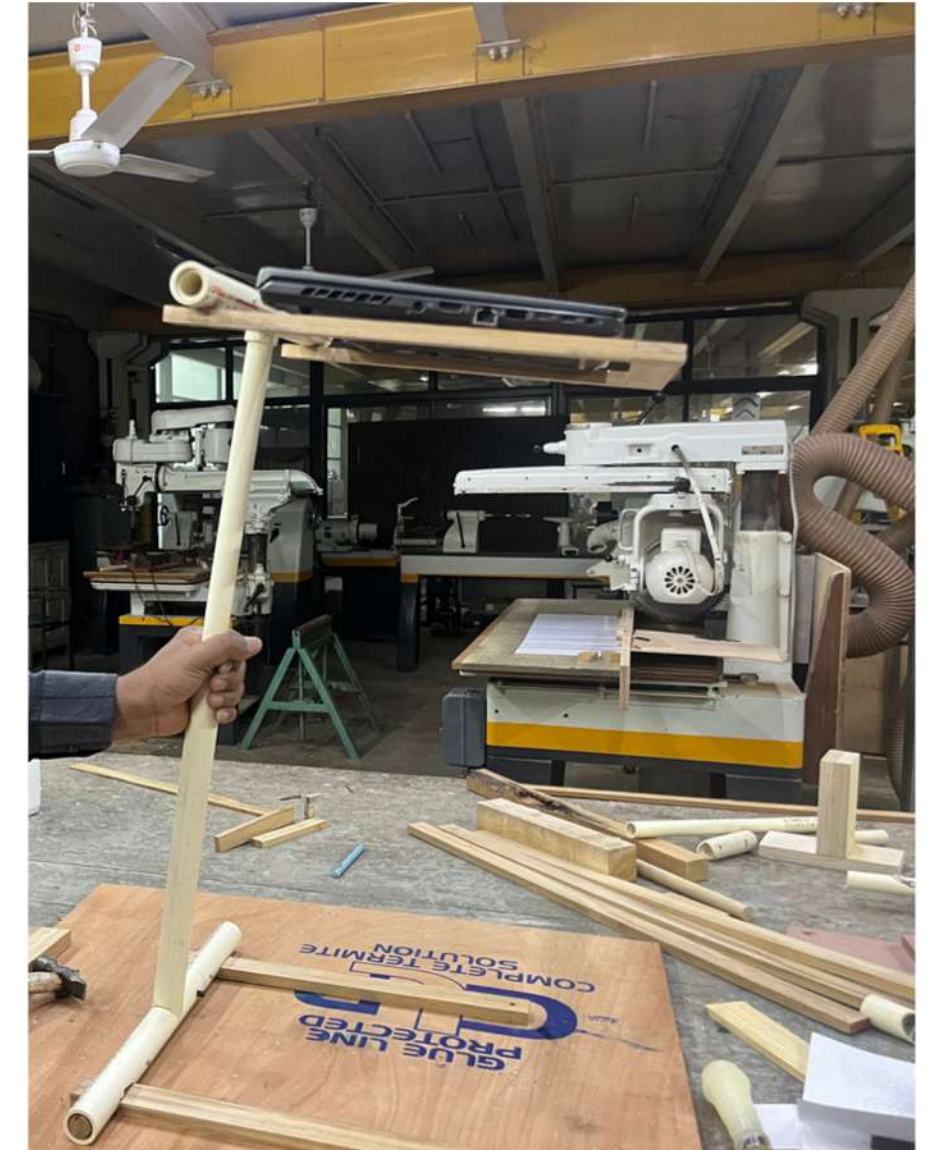


# PVC PROTOTYPE-2

further simplifying the design I ended up with lesser number of members and folding steps. A major drawback though the pins didn't lock once folded. And the overall structure still seems unsteady though it could bear weight.



STAND HEIGHT AT  
400mm



STAND HEIGHT AT  
650 mm



# USER TESTING

## THE PROTOTYPE-2

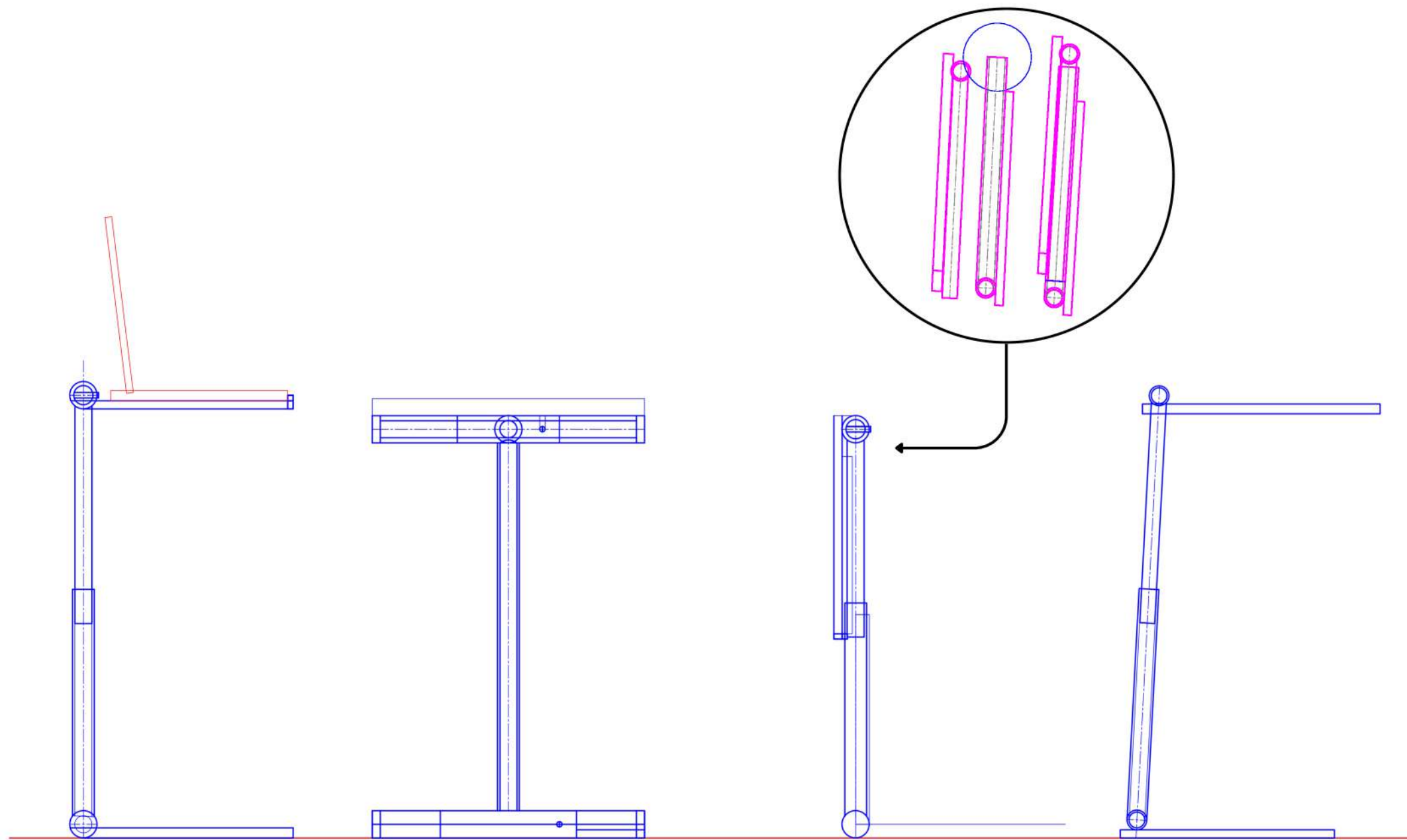


After several user testing, it's concluded that there still needs to be more direction of how to collapse and open the stand.







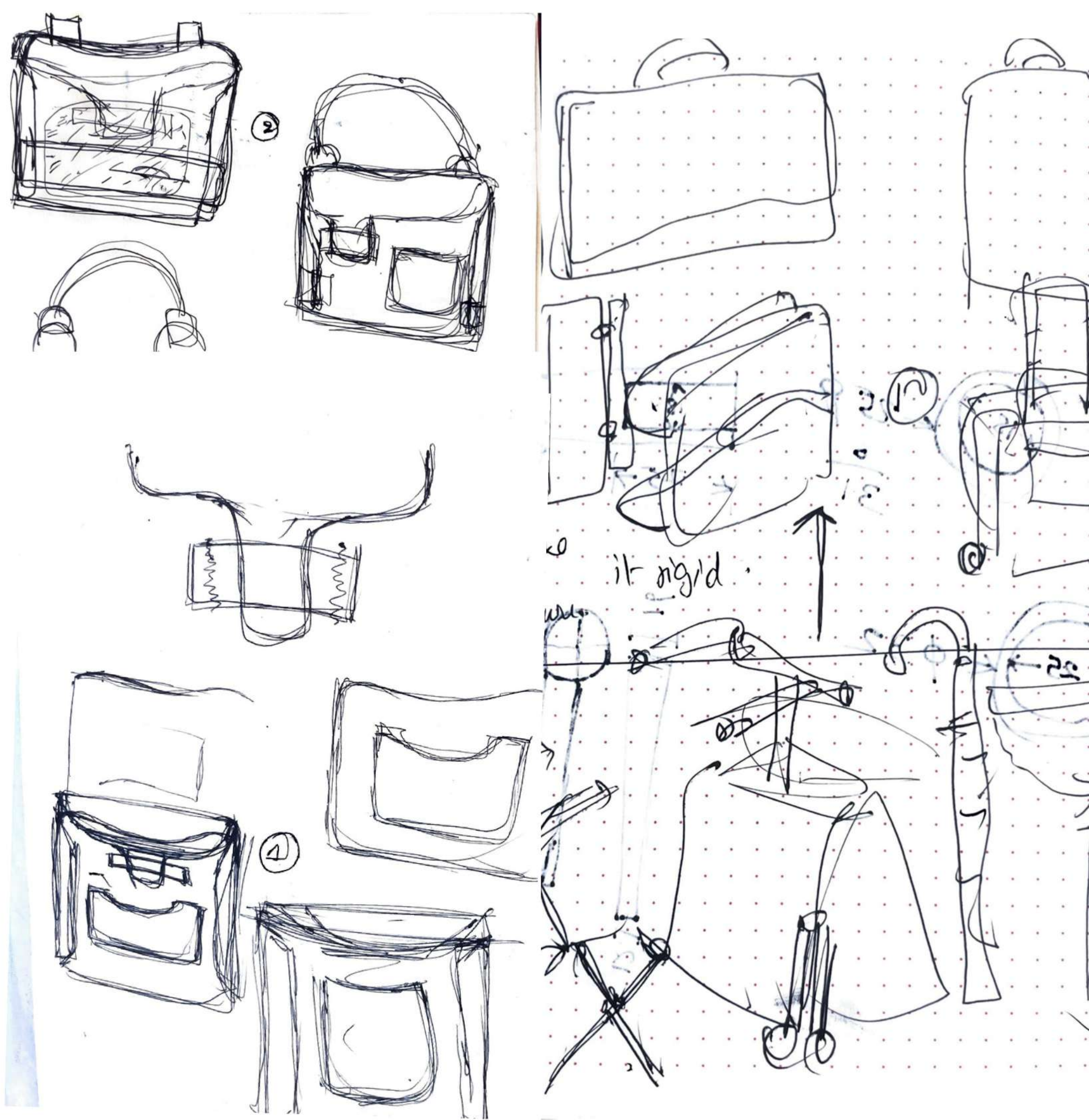


COLLAPSING DETAIL



# SLEEK BAG

Along with the working stand I wanted to attach a bag that would store the laptop once the user is done working on the stand.





# IDEATION FOR BAG

The bag needed a lot of sketching and construction detailing to attach to the stand and well as bear the weight of the laptop





# LEATHER BAG

Construction on leather was much different from canvas. Through this process I have gotten to learn about grades of leather as well.

The leather has been ethically sourced and use of already existing scrap was used to make smaller leather parts. To make use all materials are efficiently used. Almost zero waste was produced.





# PROCESS PHOTOS

working with bamboo  
made me understand  
how easy its to be prone  
to mistakes.





# FINAL STAGES

of assembly and weight  
testing.





# FINAL RENDERS

quick renders to explain the transition from active to passive state .









YOUR  
WORK  
COMAPNION

fully collapsed





with leather bag





# SIDE PROFILE

height at 400mm





# SIDE PROFILE

height at 700mm

