KOKKUVÕTE

Bakalaureusetöö oma püstitatud eesmärgid on saavutanud: on arendatud inseneri oskusi, on saadud rohkem teadmisi SOLIDWORKSi kohta, kuidas vormistada jooniseid, on tehtud turu uuring võimalikult parima mängurilaua leidmiseks, on loodud kontseptsioon mängurilaua projekteerimiseks, on loodud tehniline dokumentatsioon mängurilaua tootmiseks.

Tööl on 3 osa:

- turu uuring – on osa, kus vaadatakse juba olemasolevaid võimalusi. Kaaluti 5 varianti, lõpus tehti nende variantide võrdlus, otsustati, et autori pakutud variant on ainuke võimalus teha mängurilaud, mis vastab etteantud kriteeriumitele;
- kontseptsioonide loomine – on see osa, kus otsustati, mis kujuga on lauaplaat, kuidas laud üldiselt välja näeb. Lisaks lauale valiti lauale jalad, valikuid oli 3. Valikukriteeriumiks olid sellised parameetrid nagu tõstejõud, hind ja kas jalad on pikkuselt lauale sobivad. Samuti valiti see, kuidas sees olevad komponendid paiknevad;
- 3D projekteerimine on kõige olulisem osa, selles osas on loodud mängurilaua detailide ja kokkupanemise tehnilise lahenduse dokumentatsioon. Tehti ka arvutile elektroonika ja jahutusahel. Kõigi osade ja ka nende koostude kohta tehti joonised[Lisa 1-9]. Laud koosneb 2 alamkoostust, kokku 6 osast. Samuti tehti arvutused, et valida tööpinna paksus, mille juures see talub 120 kg. Paksus 2,1 cm. See on kõige keerulisem osa, kuna SOLIDWORKS CAD programm on arvutiressurssidele väga nõudlik, mistõttu tekkis probleeme detailide valmistamise kiirusega. SOLIDWORKS töötab kõige paremini ka Nvidia riistvaraga arvutites.

Kokkuvõtteks võib öelda, et töö kirjutamine andis palju võimalusi insenerioskuste arendamiseks. Võimalik ka lisada, et see andis ajaplaneerimise oskusi juurde, aga loomulikult saaks aega paremini jaotada. Samuti tuleb lisada, et tööd ei tehtud niisama, projekteeritud mängurilaud on plaanis ka valmis teha. On selge, et laua valmis ehitamine võtab rohkem aega kui laua disainimine. Ideaalis peaks mängurilaud olema jaanuari lõpuks täiesti nullist tehtud, kuid tuleb oodata, sest mõnda komponenti on raske osta, kuna neid müüakse ainult Euroopas või USA-s.

SUMMARY

The bachelor's thesis has achieved its set goals: engineering skills have been developed, more knowledge about SOLIDWORKS, and how to format drawings has been gained. Concepts were created on the basis of which it is possible to design the table further. And finally, a solution has been made that allows you to make a table from scratch, the material, mounting, cooling scheme and electronics scheme have been made.

The work has 3 parts:

- market research – is the part where is looked at the opportunities that already exist. 5 variants were considered, at the end a comparison of these variants was made, it was decided that the variant proposed by the author is the only possibility to make the table as required;

- creating concepts - this is the part where it was decided what shape the table top will be, how the table will look in general. In addition to the table, legs were chosen for the table, there were 3 options. The selection criteria were parameters such as lifting power, price and whether the legs are suitable for the table in length. It was also chosen how the components inside are arranged;

- 3D design was the most important part, as all the details were made here, the table itself was assembled and the table fixings were chosen. Electronics and a cooling circuit for the computer were also made. Drawings were made of all parts and their assemblies [Lisa 1-9]. The table consists of 2 subassemblies, a total of 6 parts. Calculations were also made to choose the thickness of the work surface at which it can withstand 120 kg. Thickness 2.1 cm. This is the most difficult part, because the SOLIDWORKS CAD program is very demanding on computer resources, so there were problems with the speed of manufacturing parts. SOLIDWORKS also works best on computers with Nvidia hardware.

In conclusion, writing the paper provided many opportunities to develop engineering skills. It is also possible to add that it increased time management skills, but of course time could be better distributed. It should also be added that the work was not done just like that, because this decision is made in life. It does not work as simply as in design, because theory and practice often diverge. Ideally, the entity table should be made completely from scratch by the end of January, but we must wait, because some components are difficult to buy because they are only sold in Europe or the USA.