Document de analiza *DolorLectum*

(Carpe diem, carpe noctem, carpe omnia!)

DolorLectum este un produs inovativ ce aduce in casele clientilor atmosfera futurista atat la nivel decorativ cat si functional. Scopul acestui pat inteligent este de a maximiza gradul de confort resimtit in urma utilizarii. Calitatea serviciilor oferite este determinata de usurinta cu care intreaga gama de functionlitati poate fi controlata prin intermediul unui singur dispozitiv.

Obiective

Pentru a valida necesitatea unui astfel de produs, am luat in considerare urmatoarele obiective:

- Asigurarea unui somn odihnitor, relaxant, de o calitate superioara.
- Asigurarea productivitatii clientului.
- Disponibilitatea diverselor modalitati de divertisemnt.
- Controlul asupra tuturor functiilor intr-un singur dispozitiv.
- Exprimarea unei atmosfere moderne.
- Ameliorarea problemelor de natura medicala.

Publicul tinta (User personas)

Pentru descrierea publicului tinta am utilizat modelul "user personas" pentru ca ofera o modalitate usor de utilizat pentru caracterizarea utilizatorilor.

Overly productive person

Age: 20-35
Work: Manager/CEO
Family: Married

Personality

Introvert ...|.............................. Extrovert
Thinking ....|........ Feeling
Sensing ....|........ Intuition
Judging ...|.............................. Perceiving

Bio

This user is obsessed with productivity and will do anything so that when the inspiration hits him/her to get right on with the project he/she has in mind. Contary to popular beliefs he/she does not like interacting a lot and will do most of the work from the comfort of his/her home together with trustworthy cats and dogs.

GOALS

To create an empire
To focus on himself at the same time
To never miss a zoom meeting

Frustrations

Social interactions
Environments that are uncomfortable

Computer programmer

Age: 20-100
Work: Software Developer
Family: Not Married, No Kids

Personality

Introvert |.............................. Extrovert
Thinking |.............................. Feeling
Sensing ....|........ Intuition
Judging ....|.... Perceiving

Bio

This user likes work and comfort on the same level. He will dedicate his time to improving every single line of code, but will do so only if he can avoid looking the user in the eye, and if a hot cup of coffee is ready for him when he feels like it. Perfect for working from home in a bed with a nice state-of-the-art coffee server integrated

GOALS

To write code ready to release
To drink as much coffee as humanly possible
To always miss a zoom meeting

Frustrations

Social interactions
Environments that are uncomfortable

My house is smarter than yours guy

Age: 35-40
Work: Electrician
Family: Married, Kids

Personality

Introvert ....|.. Extrovert
Thinking ....|.............. Feeling
Sensing ....|........ Intuition
Judging .....|.............................. Perceiving

Bio

This user is in love with gadgets and will do anything, will even sell a kidney to get some state-of-the-art hardware to make his life just 0,0001% easier. His family tells him that he doesn't need any of those products but he tells them that it's his last resort and they bring him peace.

GOALS

To make a better life for himself and his kids
To make everything around him connected
To show everyone his gadgets

Frustrations

Kids eat sweets before dinenr
Government taxes on some of his gadgets

The I've seen more doctors than there are stars in the sky user

Age: 20-60
Work: Data Analyst
Family: Married, Kids

Personality

Introvert	.................|................	Extrovert
Thinking	|.................................	Feeling
Sensing	....|............................	Intuition
Judging	..............................|.......	Perceiving

Bio

This user has had a really bad posture (as does most of the population) and is trying to fix this by buying ergonomic chairs, doing yoga and monitoring his sleep so he gets as much rest as he can in order to have energy to correct his posture during the day.

GOALS

To understand human body
To be pain free
To test every solution that promises him comfort

Frustrations

Every position gets to hurt after some time
Has to get up once he found a comfortable position

The Sloth

Age: 20-30
Work: McDonnald's
Family: Not married, No Kids

Personality

Introvert	|.................................	Extrovert
Thinking	.................................|	Feeling
Sensing	....|............................	Intuition
Judging	|.................................	Perceiving

Bio

This user values comfort over everything else. There is no point in arguing with him because he knows the easy way out is to let you talk. He will lisen, because he is a good listener but won't care. He might even leave you a good comment on linkedIn if he is feeling energetic.

GOALS

Eat
Sleep
Repeat

Frustrations

Food requires you to get out of bed
Literally every physical activity

Fluxuri (User stories)

1. Fiind o persoana ce este pasionata de dezvoltarea personala as dori sa am acces asupra cat mai multor device-uri care sa imi permita sa imi monitorizez somnul si statistici pe care sa pot sa le interpretez.
2. Fiind o persoana ce a avut de suferit de pe urma pozitiilor incorecte de odihna si munca vreau un masaj calitativ, rapid, disponibil oricand pentru a trece peste durerile insuportabile de spate.
3. Fiind o persoana ce uraste procrastinarea simt ca ma las dus de val de cele mai multe ori si atunci as dori un device care sa imi obstructioneze accesul la televizor cu totul, nu doar un temporizator peste care pot sa trec usor.
4. Fiind o persoana ce intelege ca echilibrul munca-timp personal este cel mai important as dori sa profit la maxim de momentele de relaxare si de aceea vreau un pat cu functionalitati care sa minimizeze nevoile mele de a ma ridica.

5. Fiind o persoana pasionata de carti, as dori un mediu confortabil si primitor, un pat inteligent care sa inteleaga nevoile mele atunci cand citesc si sa se plieze pe stilul meu.
6. Fiind un pasionat fata de micile detalii care ne pot face viata mai frumoasa, as dori un device programabil care sa umple linistea si sa ma incante cu melodii ce sporesc productivitatea
7. Fiind o persoana ce petrece timpul mai mult pe drumuri, as vrea ca atunci cand ajung acasa sa gasesc un pat cald care sa imi aduca aminte ca in sfarsit sunt linistit si in siguranta.
8. Fiind o persoana ce petrece mult timp in compania produselor de curatare as dori sa am o saltea curata cat mai des posibil.
9. Fiind o persoana mai mereu pe fuga, as dori sa nu mai pierd timp dimineata pentru a imi aranja patul in caz ca am musafiri.

Cerinte functionale si nefunctionale

Pe baza tipurilor de utilizatori si fluxurilor descrise mai sus, am identificat urmatoarele o serie de cerinte, cat si o multime de categorii pentru acestea.

Categorii
- frontend
- backend
- embedded
- devops
- management

Cerinte functionale generice
1. interfata web pentru monitorizarea datelor primite de la senzori
2. interfata web pentru actionarea mecanismelor (cum ar fi cel de masaj)
3. interfata web pentru programarea actiunilor recurente
4. broker de mesaje pentru colectarea datelor de la senzori (MQTT)
5. server abonat la brokerul de mesaje pentru a lua decizii bazate pe datele de la senzori
6. API de actionare pentru dispozitivele mecanice
7. API pentru interfata web pentru programarea actiunilor recurente
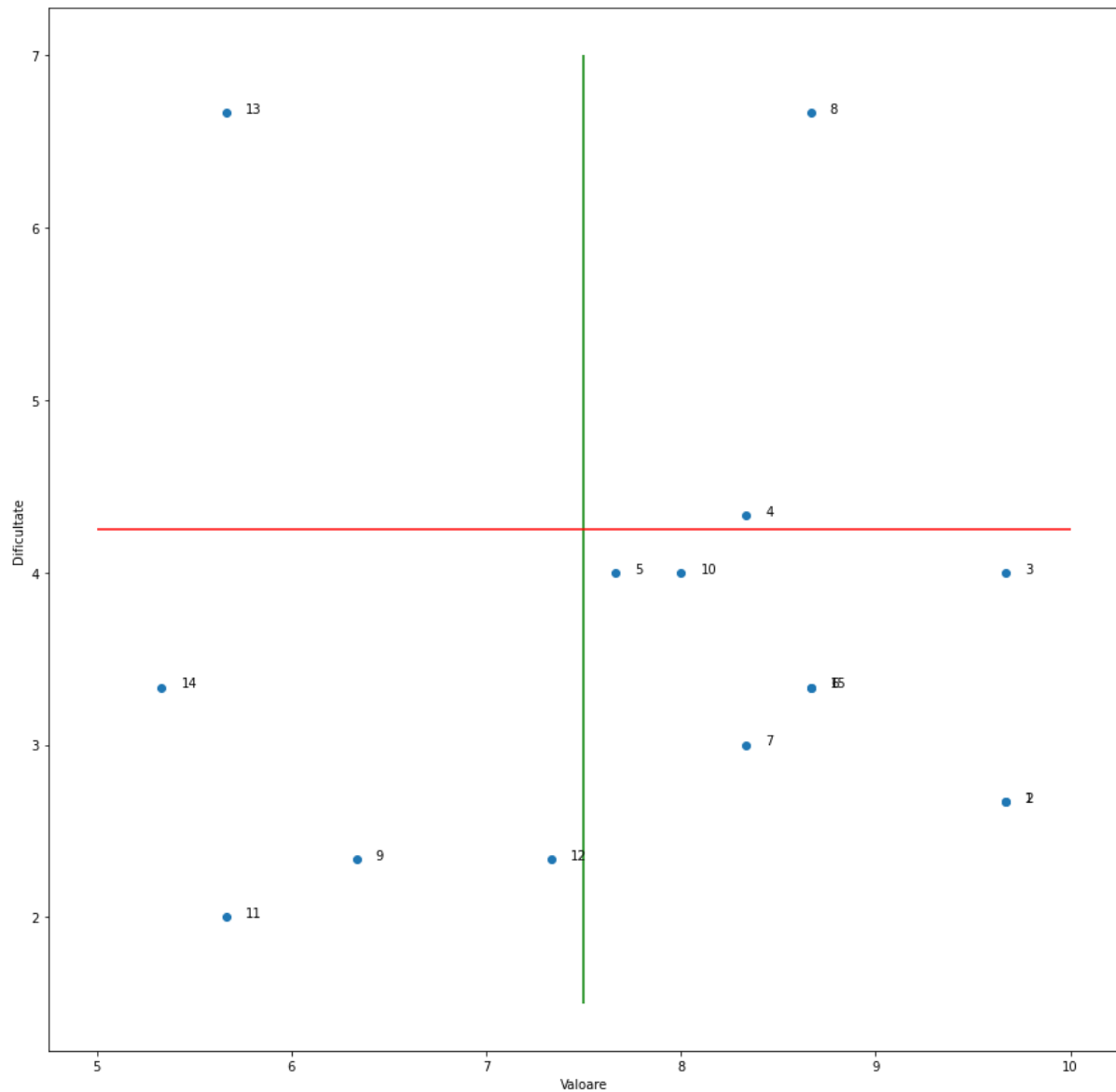8. server de machine learning pentru a invata preferintele utilizatorului

Cerinte functionale specifice
1. implemntare software lampa
2. implementare software sistem de sunet
3. implementare software mecanism mutare televizor
4. imlementare software sistem termic
5. implementare software robot de facut patul
6. implementare software aspirator saltea
7. conecatare la internet pentru a obtine melodii

Cerinte nefunctionale
- deployment simplu
- performanta
- interfata usor de folosit
- securitate
- fiabilitate

Diagrama valoare vs dificultate

Proiectul se afla pe Github la adresa https://github.com/JustBeYou/DolorLectum. Alocarea rolurilor se poate vedea in tab-ul de issues.