

SORTING HAT

BY IVAN OVCHAROV

INTRO

Despair over choosing a master's program made me think I could outsource this impossible task. Let someone else pick my MA for me!



STAGES

The project had several stages: data collection, building the game script, and creating the web interface.



STAGE 1

First of all, from the HSE University Faculty of Social Sciences master's programs page, I scraped program titles by field and links to their pages. Then, from each program's page, I scraped instructors' names and links to their profiles. The result was a nested dictionary: level one – field names as keys; level two – program names as keys; level three – instructor names as keys. I then dumped the dictionary to JSON and saved it as a .js file.

```
newdictma = {}
for napr, progs in dictma.items():
    newdictt = {}
    for prog, linkk in progs.items():
        link = linkk
        html = requests.get(link)
        soup = BeautifulSoup(html.text)
        newdict = {}
        for i in soup.find_all('a', class_='b link_dark2 link'):
            newdict[i.text] = 'https://www.hse.ru' + i.get('href')
        newdictt[prog] = newdict
    newdictma[napr] = newdictt
newdictma
```

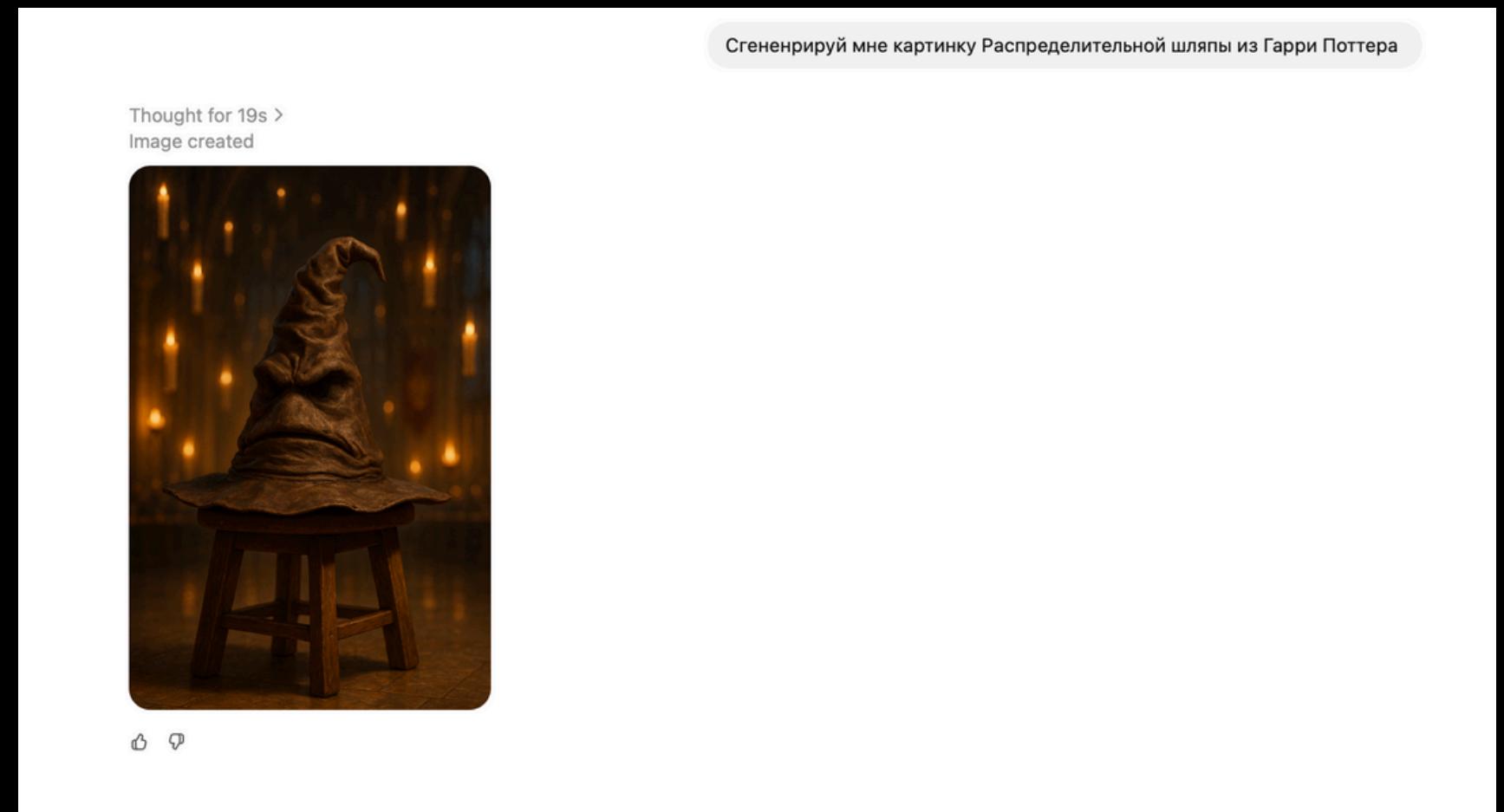
STAGE 2

Next, I implemented the Sorting Hat logic: it asks for a name, prints a short message, selects one field and shows it, then selects a program within that field and shows it, and finally selects an instructor in that program and shows their name with text ending in “Meet him,” which links to his page.

```
202 | tutorAsk.style.display = "block";
203 | } else {
204 | | progResult.textContent = "Не удалось выбрать программу.";
205 | }
206 });
207
208 // Научник - «нет»
209 noTutor.addEventListener("click", () => {
210 | tutorAsk.style.display = "none";
211 | tutorBlock.style.display = "block";
212 | tutorRoulette.textContent = "Без научника 😞";
213 | tutorResult.textContent = "В таком случае - успешного поступления!";
214 });
215
216 // Научник - «да»
217 yesTutor.addEventListener("click", async () => {
218 | tutorAsk.style.display = "none";
219 | tutorBlock.style.display = "block";
220 | tutorResult.textContent = "";
221
222 const profMap = (DATA[chosenDir] || {})[chosenProg] || {};
223 const profs = Object.keys(profMap);
224 const picked = await spin(profs, tutorRoulette, 1500);
225
226 if (picked){
227 | const link = (profMap[picked] || "").toString();
228 | tutorResult.innerHTML = `Твой преподаватель - <strong>${picked}</strong>.
229 | | <a href="${link}" target="_blank" rel="noopener noreferrer">Познакомься с ним</a>.`;
230 } else {
231 | tutorResult.textContent = "Не получилось выбрать преподавателя.";
```

STAGE 3

After that, I built the web interface, generated an AI image of the Sorting Hat, removed the background, and added the icon to the interface. Finally, I pushed the project to GitHub and published it as a webpage.



RESULT

You can see the result here:

Or use this link: <https://ivan04ov.github.io/sorting-hat/>

Gh repository: <https://github.com/ivan04ov/hw-ws-2>



GOOD
LUCK!