Database:

1. School database slonk.fel… – free for testing purpose maybe
2. For future we have webhosting on Endora

Development of Backend:

1. **Python**

* Flask(connecting data from python to html)
* jinja2(for using data from app in HTML)

**Pros**: - easy to implement  
 - some experience with web application

**Cons**: - maintainability  
 - not all members are used to code in Python

1. **Java** - Java Servlet and JSPs(implement HTML technology) using **Apache Tomcat** for servlet for dynamic response and data persistence  
   - *JDBC*  - for database (ideally with hibernate)

- *Java* *Maven*, *Gradle* - for better implementation

- *Rest* *api* - creating web services

- *Java* *Spring* - building web applications

- *JPA* - describes management of relational data in applications using Java

**Cons**: almost no experience with this technology (web technology)

Harder than python implementing

**Pros**: learn new things

All are experienced in Java console app  
 preferable for our subject

Development of Frontend

- *jQuery*, *JavaScript* – for other custom functionality on the Website  
- *CSS* – for better design of the app  
- *html* – necessary for running the app

For developing our Frontend web application we practically use only these options, there are probably no other tools that would be more helpful than those.

Testing of application

- *Unit tests*- *Groovy*   
- *Spock* *framework*

Those testing tools will be used at the beginning after we release some alpha version, we will probably test it manually.