# **5. List of non-functional specs**

## **General**

1. Application shall be served from the team's account.
2. Pay functionality (how to pay for goods and services) shall be simulated with proper UI, no backend.

## **User Interface**

1. Application shall be very easy to use and intuitive. No prior training shall be required to use the website.
2. Application shall be optimized for standard desktop/laptop browser, and shall render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome. It shall degrade nicely for different sized windows using class approved programming technology and frameworks so it can be adequately rendered on mobile devices.
3. The language used shall be English.

## **Infrastructure**

1. Data shall be stored in the MySQL database on the class server in the team's account.
2. The web service application shall be run in a node.js web server like express.
3. Based on the service side application (RESTful service) shall it be possible to build other clients like an android app or a universal windows app.

## **Deployment and Upgrade**

1. An application deployment or an application upgrade shall not take longer than two hours.
2. An application deployment and an application upgrade shall be easy as possible for the administrator. For error-prone or time-consuming configurations shall be provided a configuration script and guidance.

## **Performance**

1. No more than 50 concurrent users shall be accessing the application at any time.

## **Development Tooling**

1. Application shall be developed using class provided LAM stack.
2. Application shall be developed using pre-approved set of SW development and collaborative tools provided in the class. Any other tools or frameworks shall be explicitly approved by Prof. Todtenhöfer on a case by case basis.
3. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development, and only the tools and practices approved by instructors.

**File Upload**

1. To prevent the server from a user’s spam, an image size is limit of 5MB per file and a video size limit of 30MB.
2. A single offer is only allowed to contain up to 7 images und 1 videos.
3. A review for an offer shall contain only a single image.

## **Security**

1. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
2. User account passwords shall be saved in the database as hash values.
3. Messaging between users shall be done only by class approved methods to avoid issues of security with e-mail services.
4. Site security: basic best practices shall be applied (as covered in the class).
5. The communication between the client application (browser) and the server application shall be run over HTTPS.
6. A user account shall be blocked after ten following failed sign in tries.

## **Permission Concept**

1. An unregistered user shall be having the permission to …
   1. sing up
   2. search based on base filters and browse for offers
   3. see primary details to an offer
2. A registered and singed in user has the same permission as an unregistered user. Additional to this permission he shall be having the permission to …
   1. sign in
   2. search based on expanded filters
   3. see the secondary details to an offer
   4. create a review to an offer
   5. retrieve the contact information from landlord to an offer
   6. create and manage his favorite offers
   7. manage his profile
   8. upgrade his account to a landlord account
3. A signed in landlord has the same permission as a registered and signed in user. Additional to this permission he shall be having the permission to …
   1. create an offer
   2. manage his offers