

## CSE 135 hw4 summary

### Security:

- We put database username, password and md5 salt in a separate file, and make this file private so that they are not visible to the public.
- We turned off directory browse in Apache to forbid others from look at our directory structure. We check for session in every page to make sure they don't jump urls.
- Remote connection is turned off for to secure the database.
- We check the format of every single form to ensure they don't include invalid characters like quotes, script tags, ect to prevent sql injections and scripts in website.
- And mimetype of files uploaded by the users were checked so that the filename is consistent with the mimetype.
- we do urlencode on soubdboards names, sound names and image name to avoid invalid characters in the file system.

### Performance:

- We compress all pictures and sounds which uploaded by users.
- We cache all static files of our website.

### Load time comparison:

For example, public board **sponge bob**:

before: 3.88s            after: first time load takes 750ms, after that it takes only 169ms.

total size of files transferred:

before: 6MB            after: 1.4MB

For public board **cars**

before: 1.08s            after: first time load takes 600ms, after that it takes only 145ms.

total size of files transferred:

before: 2.6MB            after: 511KB