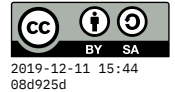# Assignment 12

due *Mon 16 Dec*

Starting with the sample code for form processing on December 9 and 11, extend the validation to also check password rules: the password must have length at least 7 (`minPasswordLength`) and it must contain at least one digit.

There is also a slight problem with how we check for required fields. We're using `T.null` (where `T` is the `Data.Text` module), which is true when the text string is empty. But a user could satisfy that validation by entering one or more spaces. Try it! If I put a single space as my first name, it will pass validation and the acknowledgment page says "Hello, ". There is a function:

T.strip **:: T.Text -> T.Text**

that will remove any leading or trailing spaces from a text string:

```
□> T.strip "   hello   "
"hello"
□> T.strip "     "
""
```

So you should use that in combination with `T.null` to reject strings containing only blanks.

Finally, add one more **required** text field to the 'UserReg' structure, to represent a phone number. The validation rules for phone numbers are that they contain at least 7 digits. They may also contain spaces, hyphens, dots, or parentheses, but no other characters. Add that to the validation rules and the registration form.