DESIGNING A SELF- AND PEER-ASSESSMENT METHOD TO GRADE EQUITABLY AND REDUCE SOCIAL LOAFING IN GROUPS

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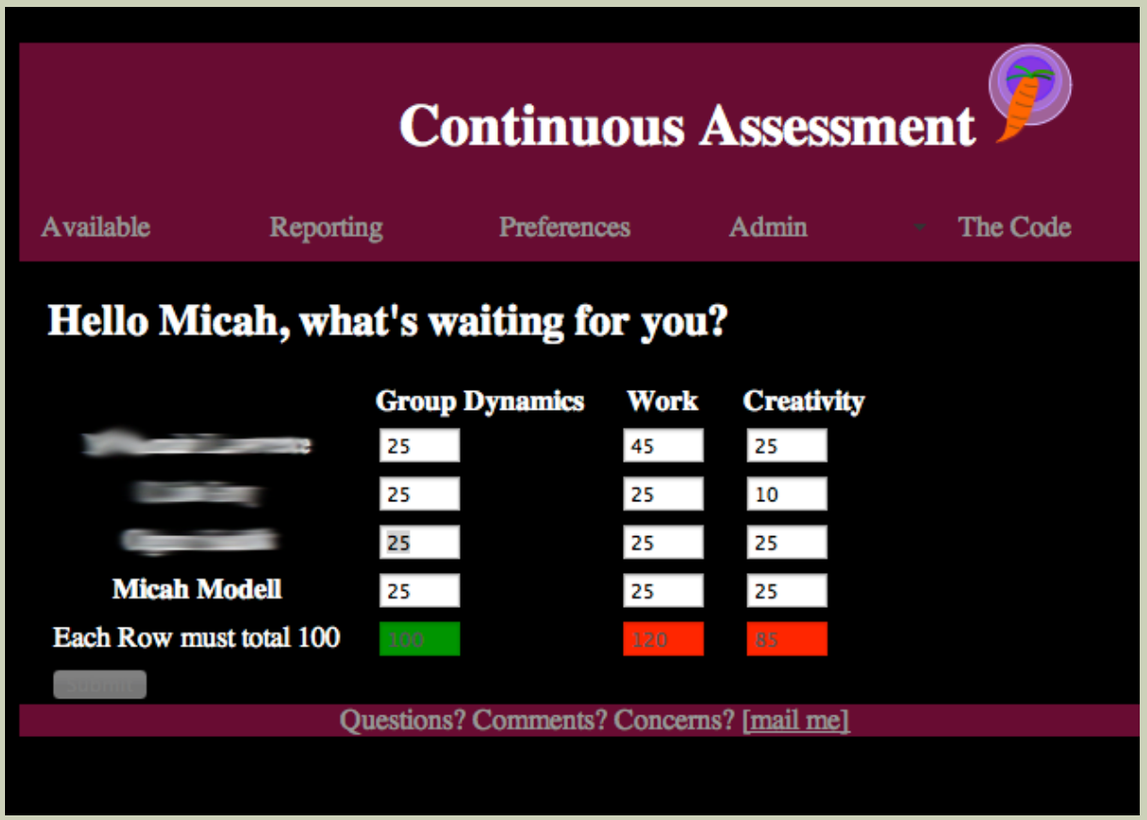
WHAT IS A DESIGN CASE?

- Description of a designed artifact or experience
- Common in many design fields
- Accumulated by expert designers
- Serve as inspiration or precedent

For information and examples, refer to the International Journal of Designs for Learning (http://scholarworks.iu.edu/journals/index.php/ijdl)

COMPONENTS OF THE DESIGN

- Online system
- Training for students
- Email reminders
- Reports for instructor



BACKGROUND

- Corporate Experience
  - Instructional Design
  - Software Development

- Masters in Instructional Design, Development & Evaluation
  - Inspired by Vygotsky

BACKGROUND

- Game design course
  - Internal group conflicts
  - Lack of clarity on contributions to product
  - Reflection papers
    - Valuable for students
    - Less valuable for the instructor
- Other methods exist

THE CONTEXT

- Asked to teach two courses
  - Full (re)design necessary
  - Intimidating technical content
  - Graduates likely to work in groups
  - 30 students in one of the classes

THE PROBLEM

- Equitably allocate credit
- Address concerns of students
  - Credit for work done
  - Student voice

INFLUENCES (PRECEDENT)

- Tucker & Reynolds' (2006) work
- Enterprise software development (web applications)
- Human-Computer Interaction Design
- Red Hat performance-based assessments

THE CONSTRAINTS

- 3 weeks to delivery
- Security of confidential data
- Modular reusability (for class)
- Low impact on students

IMPLEMENTATION

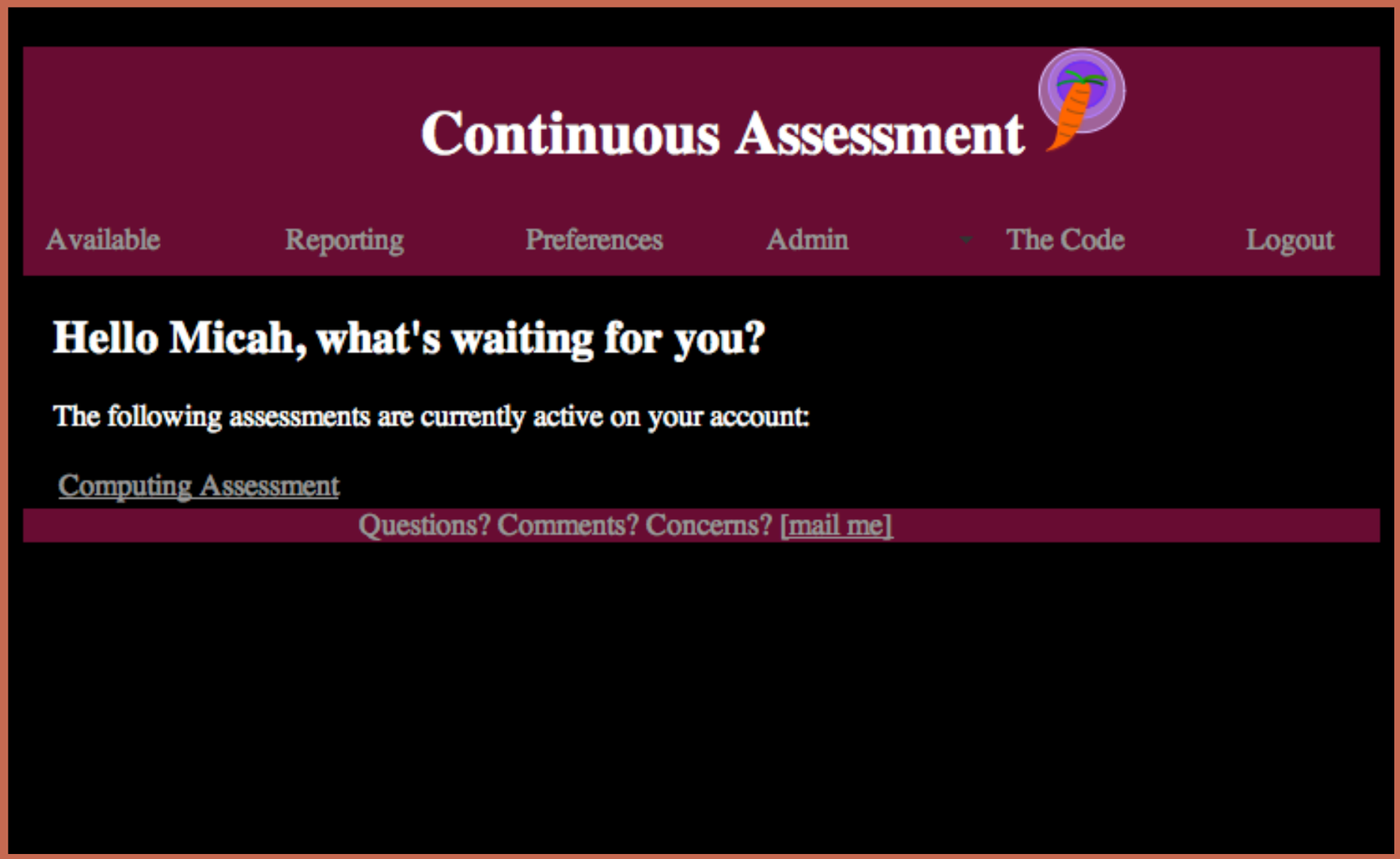
- Iterative approach
  - Hybrid design/development
  - Evolving design

- Over-designed initially

IMPLEMENTATION

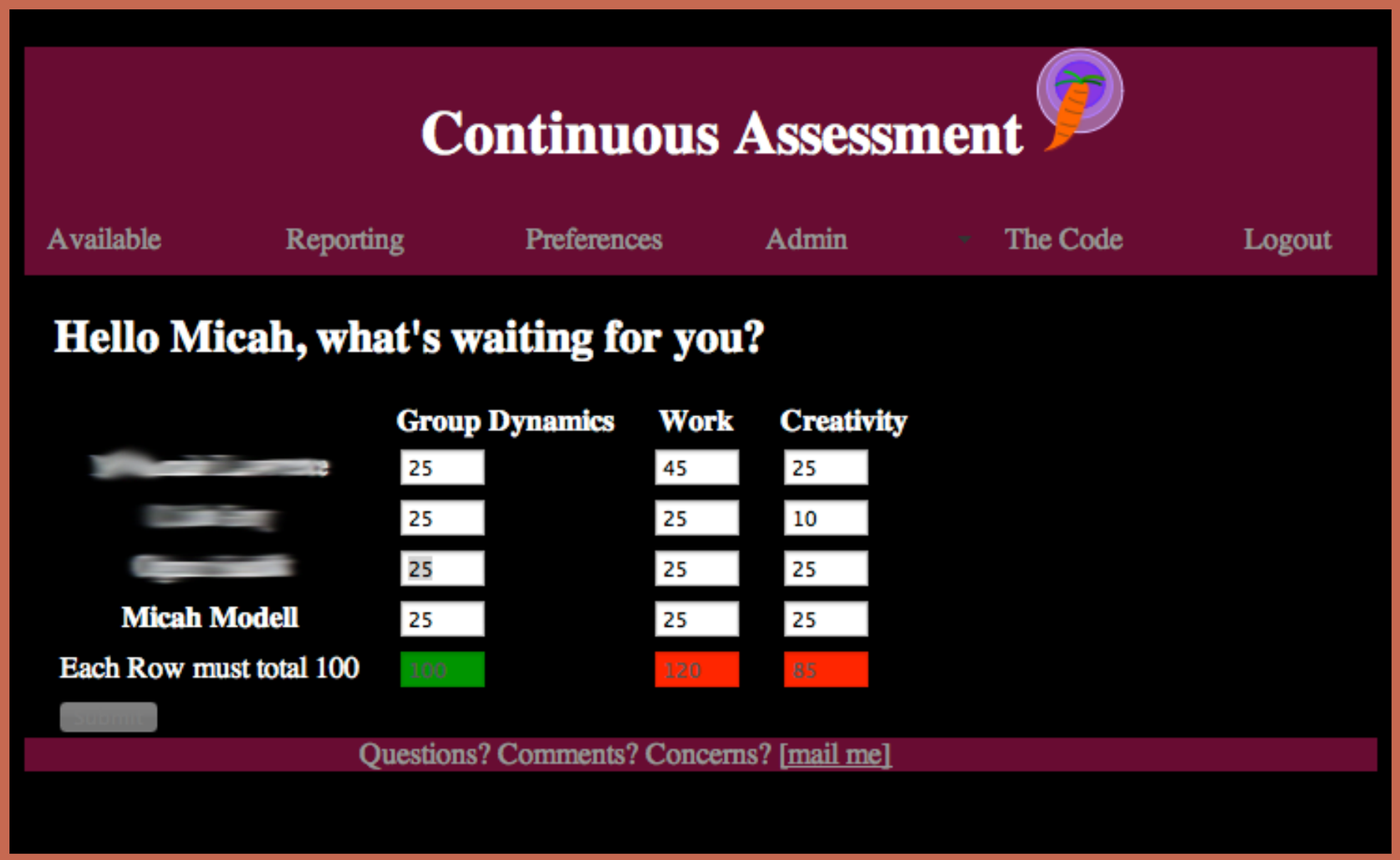
- How exactly would I use this?
  - Formative in addition to summative
  - Look for trends (not spikes)

- Is all effort the same?
  - Categories of effort
    - Work
    - Creativity
    - Group Dynamic



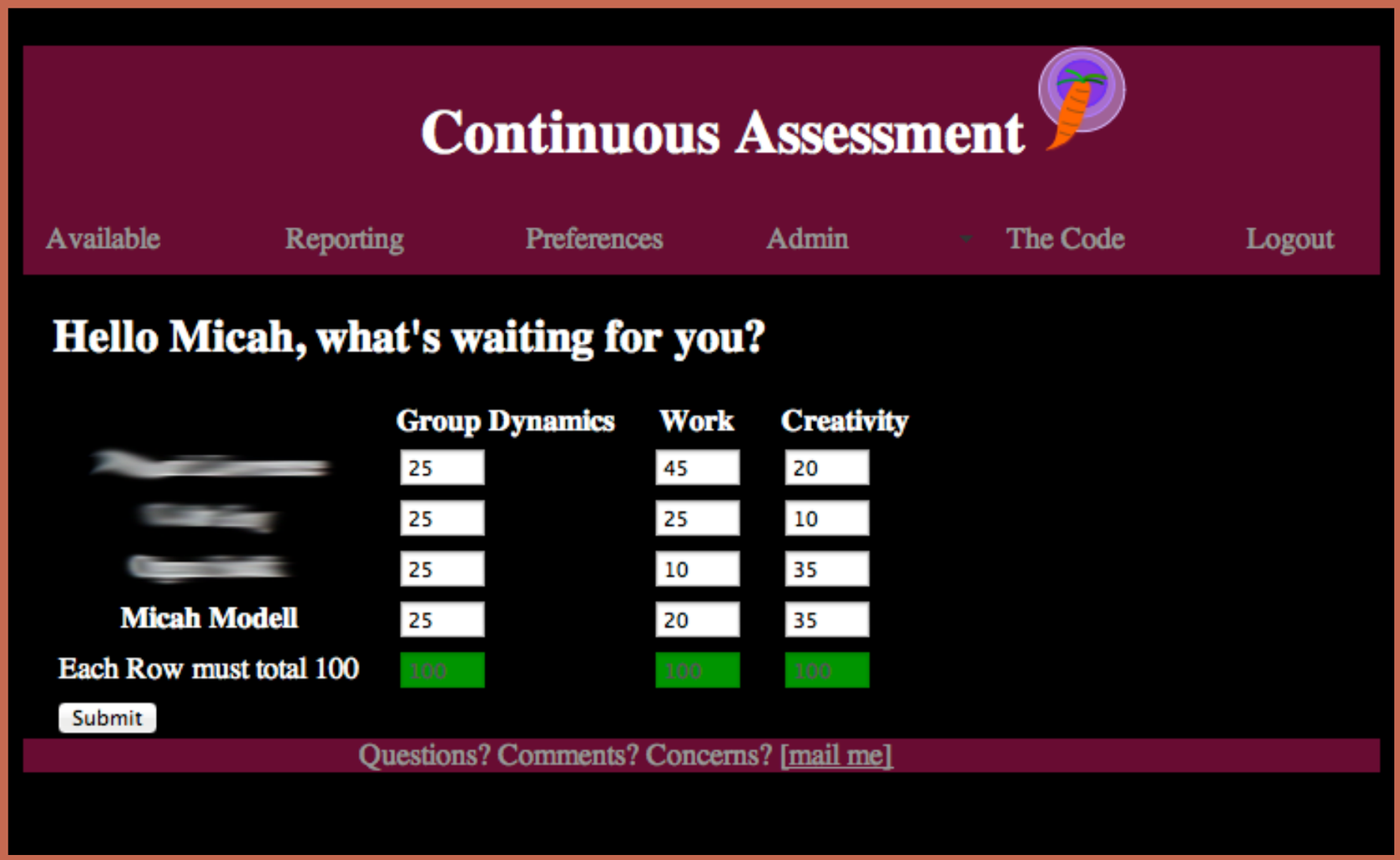
MAKE IT SIMPLE

A reminder email brings students here



MATRIX OF VALUES

Immediate feedback on math

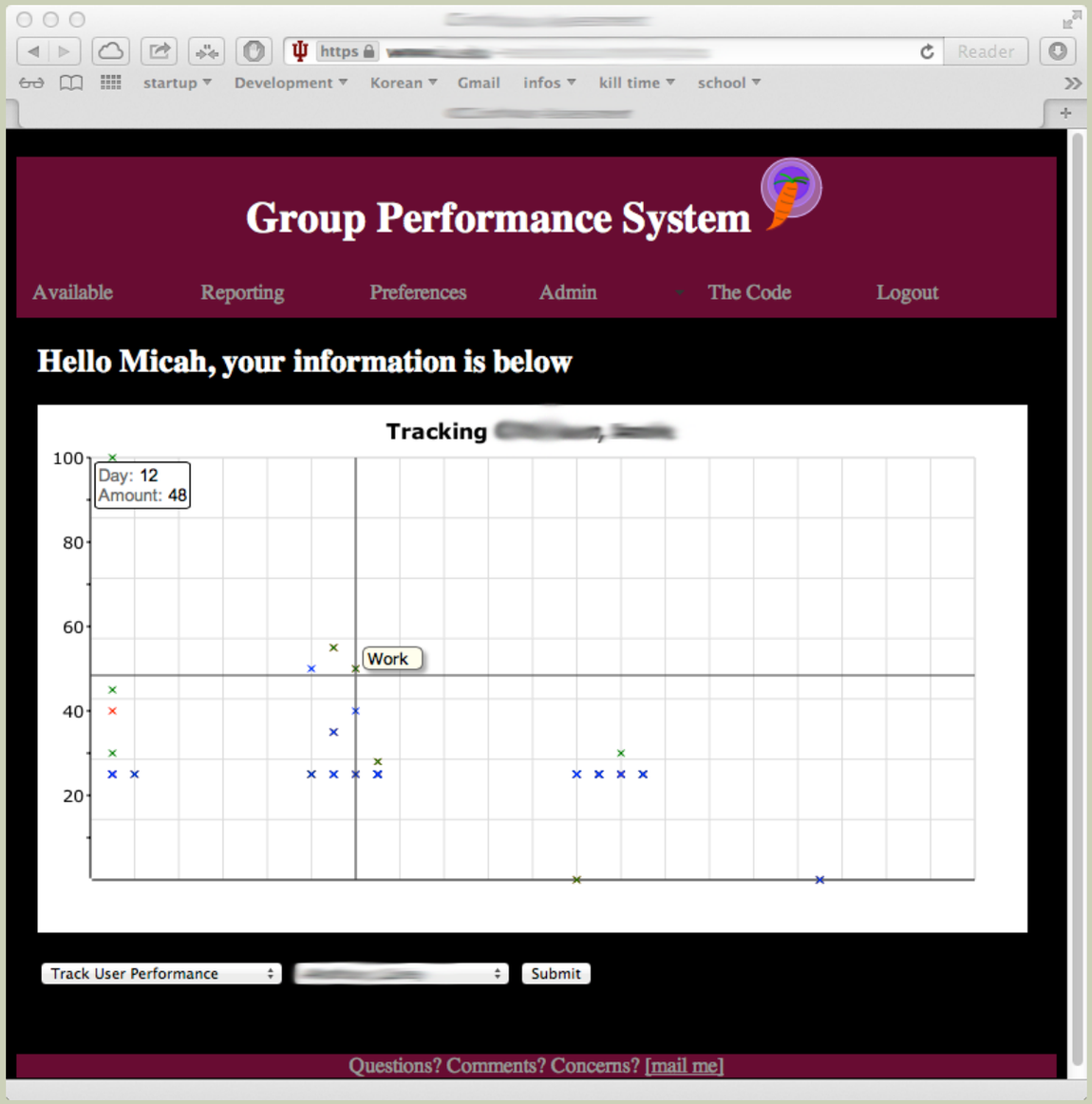


READY TO GO?

Data is only accepted when valid

IMPLEMENTATION

- Date math is hard
- Prototype reporting was *good enough*
- Individual reports only



THE EXPERIENCE

- Indicated group issues
- High rate of completion
- Very little ongoing support was necessary

FUTURE

- Research
  - What does the data mean?
  - Categories/behaviours
  - Longitudinal research
- Reporting
  - Proactive/formative
  - Summative calculations
- Administration
  - Support for organization structure

REFERENCES

- Boling, E. (2010). The Need for Design Cases : Disseminating Design Knowledge. International Journal of Designs for Learning, 1(1), 1–8. Retrieved from http://scholarworks.iu.edu/journals/index.php/ijdl/index
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- Vygotsky, L. S. (1978). Mind in society. (M. Cole, S. Scribner, V. John-Steiner, & E. Souberman, Eds.) (p. 159). Harvard University Press.

REPORTED DATA