#### **Senior Project Final Self-Assessment**

This document is intended as a guide for the senior project team to assess its performance in a number of dimensions. You need not answer each question in detail, rather, use the questions as a guide for the kinds of items to assess. Add items you feel are appropriate.

This self-assessment will be one of multiple elements that your faculty coach uses to arrive at an assessment of the team's performance for this second term. The other elements that the faculty coach will use include: direct observation of the team, team peer evaluations, reviews by other faculty during the project presentation, sponsor evaluation, and project deliverables. These self-assessments will also be used as part of the SE program's accreditation and curriculum improvement efforts.

To complete this self-assessment the team should carefully consider each of the questions and provide an honest evaluation of the team's performance. Your faculty coach will inform you when this self-assessment is due and how to deliver it.

Team: SIS.io - Ethan Mick, Michael Caputo, Shawn Thompson, Zach Masiello

Project: SISCalendar

Sponsor: ITS EWA Team

#### Product

1. Did the team prepare all the documentation artifacts requested by your faculty coach and sponsor? Were these documents carefully inspected prior to delivery? How would you assess the quality of the document artifacts?

Yes. We worked hard to identify the documents which ITS would need by the end of the semester. We created them, and updated them throughout the semester. These documents were then posted to their Wiki as well as the team website. The document quality has been vetted and reviewed by ITS.

### 2. How well did the team elicit the requirements? What approaches were used to elicit the requirements? Were key requirements missed? What methodology was used to document and validate the project requirements?

SIS.io worked hard to elicit requirements in the beginning of the fall semester. We interviewed the client, brainstormed, asked students for feature requests, and prototyped. No key requirement was missed, and many additional requirements were added to create a cohesive product. Evolutionary Delivery was the methodology used and we created a prototype to see if our "guesses" on requirements were correct. This led us to create user

stories and a formal SRS.

### 3. Did the team explore the entire design space before arriving at a final design? Have there been many errors found in the design? Was it necessary to make major changes to any part of the design? What were the reasons for the change?

The design was not up for too much discussion since most of it was defined by Struts, the framework we choose. Most Web Systems follow similar patterns, (MVC, with big models and small controllers), so we just went all in with that. This led to a simple and easy to understand system. No big changes were needed in our design, although some Struts quirks had to be worked around.

### 4. How has the development and implementation progressed? What percentage of the product do you estimate was completed? Is the team providing the documentation within the implementation artifacts?

Development first semester was broken into tasks and assigned to members. This allowed us to build out our prototype quickly. Tasks ensured no two people worked on the same thing at once, but there was no formal estimation for the tasks, just rough guesses. We completed everything we wanted to in our first semester. Second semester we used scrum which allowed us to have a solid framework for tasks assignment. We completed what we wanted. Comments have been added as necessary to the code.

# 5. What was the team's testing strategy? Did the team develop a test plan? If so, was it followed? Did the team performing unit testing? Did the team use any test frameworks, such as JUnit? What are the testing results? Were any major defects found during system test? If so, were they fixed? Did the team do regression testing?

We have a test plan, but testing is challenging with this particular project. Without a persistent model our model was just simple objects holding information without much substance. This meant the tests would be trivial. Most of our tests were system tests with Test Accounts given to us by ITS. Regression testing was manual.

- 6. Products need to be designed within guidelines and constraints appropriate for each project. It is also important to consider the impacts of the products that are designed. In the following categories discuss the constraints and impacts that have a bearing on your project. Note that all of these categories may not have bearing on your project but your project is probably affected by many of them.
  - Economic issues N/A
  - Environmental issues N/A
  - Social issues N/A
  - Political issues N/A
  - Ethical issues N/A
  - Health and safety N/A
  - Manufacturability N/A
  - Sustainability N/A

Perhaps just knowing that someone is going to get calls for issues and we need to ensure that those people know how to fix the system or help the users.

7. What industry and engineering standards was your project required to adhere to? Were these new standards that the team had to learn? Did your sponsor provide you support for understanding these standards? Did you have to educate your sponsor about these standards?

Our project adhered to ITS' standards. These standards were straightforward and easy to work with.

#### Process

1. What was your process methodology? Was the process appropriate for the project? Did you follow the process or modify it as the project progressed? If you could repeat the project, what would you do differently?

We used scrum for the second semester. This was appropriate because it was a good task based framework to quickly get things done while always having a shippable product. We would do scrum again.

### 2. Was there a large requirement to learn the problem domain? What approach was used to gain domain expertise? Did your sponsor provide adequately support? What forms of support did you receive?

The problem domain was not huge, but understanding the different environments and test accounts was interesting. The Sponsor was always there to answer questions we may have in this regard though.

## 3. What mechanisms did the team using to track project progress? Did they give the team and sponsor adequate insight into project progress and issues? How well did the team track its project progress? How often did these artifacts get updated on the department project website?

We used scrum to track progress. We also had a public board which the could use to follow our progress. We updated them at our weekly meetings. This allowed everyone to be on the same page. The artifacts were updated in our definition of "done".

#### 4. Did the team conduct effective meetings?

Yes, this semester our meetings were on topic, focused, and easy to follow. Agendas were sent out at our sprint planning meeting, and we used those meetings ( the day before) to plan out our meeting.

5. Did the team meet all project milestones? Which milestones, if any, were missed or were met ahead of schedule? What contributed to schedule changes? What could the team have done differently to ensure that milestones were met?

We met all milestones we laid out for ourselves, and pushed to production. This semester was good, and everyone was on the same page. Go/No Go was big, but we only had some small tweaks from it. Schedule changes were handled in our weekly meetings as scrum let us know how long things would take. Anything ambiguous we would tell the sponsor we were "investigating" and then find out how hard it would be.

# 6. Was the team required to adopt new technologies? What were these technologies? What approach did the team use for selecting the appropriate technology for the project? Did the sponsor provide any support for learning these technologies? How well did the team ramp up on the new technologies and begin to apply them effectively?

We had to learn Struts, Google API, and some web techs. We assigned a person or two to be the leader in that area and they were in charge of learning the new technology. The sponsor did not have any requirements on these new technologies (besides struts).

### 7. How well did the team maintain quality control over the project artifacts? Have all artifacts been reviewed for adherence to quality standards? What was the review process used by the team?

Quality was done through multiple people working on certain areas and using git blame if anything went wrong. Written artifacts have been given to the sponsor for review to ensure high quality. Big changes may have used Github pull requests.

### 8. Did the team have any issues with configuration management? How were these problems solved? What percentage of project artifacts is under configuration control?

We didn't have any issues. Code was in Git with Github, documents on Google Docs.

### 9. What was the set of metrics that the team tracked? Did the team gather these metrics on a consistent basis? What did the team learn from the review of these metrics?

We used many metrics, most important was velocity. Also important were tasks assigned per week, actual/vs estimated. We learned how to make our sprints more effective.

#### **Communication and Interaction**

1. How well did the team communicate project progress to the sponsor? What regular communication did the team have with the sponsor? Did the team been maintain this communication to the satisfaction of the sponsor? Were any adjustments needed in the communication over time? Were these changes initiated by the team or the sponsor?

We communicated great this semester. We regularly sent out agendas, and updated both trello board fanatically. They used theirs to send us updates, as well as send us emails. This went very well.

#### 2. Did the team need to provide technical input to the sponsor? How well did the team educate the customer in these areas? What mechanism did the team use?

We educated them in certain regards (git, google api, etc), but that was it. The sponsor was attentive and learned from these. For the most part our system worked as they expected.

### 3. Was this an effective team? What has been contributing to and detracting from the team's effectiveness? What are the team's weak points? What are the team's strong points? What changes could the team have made to make it more effective?

This was an effective team. We got a lot done, and divided up work well. Breaking things up into sprints and tasks allowed us to know who did what, and if they were working hard enough. We could of perhaps held everyone more accountable, but that's about it.

## 4. What mechanism did the team use to communicate with the faculty coach? Was communication with the coach effective? Were there any trouble spots with the faculty coach communications? What could the team or faculty coach have changed to make their communication more effective?

We communicated after meetings with the sponsor and via email. The communication was effective, and we didn't have many trouble spots. At one point there may have been a misunderstanding with scrum and why things were not updated, but this was resolved.

### 5. Did the team need to interact with department staff personnel, i.e., the office staff or system administration? Was this been handled in a professional manner? Were there any problems with these interactions?

We got a VM, but then it was taken away from us, due to a team member not securing the Jenkins install. All interactions were professional.

#### 6. Does the team have a complete website with all project artifacts stored and up-todate on the software engineering department webserver? How often were entries on the webserver updated?

Yes. The webserver was updated whenever necessary with document changes, which was mainly weekly with schedule updates.

7. How well has the team made presentations to the sponsor and faculty coach? Was the final project presentation done in a professional manner? Was the poster presentation done in a professional manner? What could have been done to improve the team's presentations?

The presentations have gone over very well. The final presentation was done in a professional manner, as was the poster presentation. ITS attended both.

## 8. Does the technical report adequately document the project and its results? Was the paper of high technical and editorial (language, style, grammar, etc.) quality? Did all teammates contribute to the paper? Did the sponsor contribute to the paper? Did the sponsor review the paper?

Yes it does. It is of excellent quality. All teammates contributed equally. The sponsor did not contribute to it, but they could read it if they wished.

9. How well did the team work with other senior project teams, coordinating access to lab space and equipment, sharing experiences and ideas, etc.?

We didn't really work with other teams. We asked other students for feedback, but that was about it.

#### **Achieving Customer Satisfaction**

1. In the team's opinion did the work satisfy the project sponsor? Were there any weak spots in this regard?

The project sponsor was satisfied. Our project is performing well in production. We could have communicated better first semester, but second semester most of those issues were resolved.

#### **Achieving Team Satisfaction**

1. Did the project satisfy the team's expectations for learning? Were there any weak spots in this regard? What could have been done differently to improve the team's learning experience?

We learned a lot in this year long project. We worked well together for the most part. We had to get to the performing stage, but things went pretty well when we did that. Perhaps in the beginning we could have tried to form a team more and outline a schedule that we adhered to and could ensure we followed it. Having accountability is important.