

### Week 3: Requirements and Plan

Zachary Finnegan:

"I found the documentation to be very professional and thorough. I noticed maybe one sentence structural problem. The only thing I have to say that can be considered constructive criticism is that in the **Requirement Specifications** section it states that the Sudoku game will be playable on a desktop browser, however, at the top of page four it mentions the need for a web application to be user friendly across multiple devices and screen sizes. To me this leads to some confusion as to whether or not the Sudoku game will be playable on a mobile device or not. If it won't be playable on a tablet or phone the wording on page 4 is confusing. It seems unnecessary if the game is only playable on a computer."

*Group 7 Responses*

*Chris Breen: Concur. Verbiage in specification, recommend adjustment. Complete*

*Ben Brandhorst: Concur with adjusting verbiage in requirements specification.*

Nicholas Groth:

"I approve of the double name strategy you guys have, we have a Stephen and a Stephanie and it has worked out great! Jokes aside this seems like a super complex project and you all have everything laid out really clearly. Your data processing steps are extremely thorough and clear. I had a suggestion in mind as I was reading, but then you guys already had it in possible enhancements + more. I would suggest maybe a challenge/timed mode? Where the user must complete each level in x seconds or must complete x amount of levels in y seconds. Overall your documentation is extremely impressive and I'm sure you all will have very little problems crushing this assignment."

*Group 7 Responses*

*Chris Breen: Dissent. Average person takes an hour(ish) to play a game, not multiple games in mere seconds.*

Stephen Masterson: No Feedback

Stephanie Lightner: No Feedback

## Week 4: Analysis

Stephanie Lightner:

"Your project is well thought out and organized. My only two suggestions are minimal. First, your **context diagram print is hard to read**. Just enlarging the picture should do the trick. Also, with your possible enhancements, the listener would add to your project, making more user friendly the is already is."

*Group 7 Responses*

*Chris Breen: Concur, must re-arrange objects vertically to enlarge and fit within the margins.*

**Complete**

*Ben Brandhorst: Concur.*

Stephen Masterson:

"Looks great. My only comments would be your last two possible risks (2 and 3). Those risks are very easy to mitigate and is consider good practice anyways to **sanitize all possible user input**. So, I'd almost not even bother putting those as risk since it would only be a risk if you guys had sloppy code and it doesn't seem like you guys will."

*Group 7 Responses*

*Chris Breen: Dissent. All user input will be sanitized; however, capturing the possible risk ensures that it is not overlooked during development.*

Zachary Finnegan:

"This was an excellently written Project Analysis. It was extremely thorough and detailed. My only gripe was the **below sentence made me a little confused**.

"newgame.html. A form is displayed **requesting** the player name and **available difficulty levels**"

To me it reads as if the display is requesting the available difficulty levels instead of displaying the available difficulty levels. Otherwise spot on."

*Group 7 Responses*

*Chris Breen: Concur. Verbiage is confusing. Form displays text field for player name input and radio options for desired difficulty level input. **Complete***

*Ben Brandhorst: Concur.*

Nicholas Groth: No Feedback

## Week 5: Design

Nicholas Groth:

"Looks like you all are still absolutely killing this assignment. I wish I could provide some more thorough feedback, but I find myself actually learning new things when viewing your groups documents. One question I have, for Scenario 6, is there **any information on how often the puzzle is saving?** The document mentions frequently, but that leaves things for interpretation, which can sometimes get sticky. Another thing is in your Project Requirements, the statement **"in any of the leading desktop web browsers" is a little vague** in terms. Although I understand there are probably thousands of browsers and getting a list of the ones that work would probably be impossible. So with that being said, just a few suggestions, most likely things your group has already addressed, but if not I hope to have shed some light into some areas."

*Group 7 Responses*

*Chris Breen: Concur. Board saves every time scratch pad is closed or changes source cell.*

*Leading browsers defined as Chrome, Firefox, Edge, Safari (statistics listed in Project Plan). Copy plan verbiage to design doc. Complete*

*Ben Brandhorst: Concur with adding more detailed verbiage in design document.*

Benny Iko:

"Your function diagram does a good job of showing the static view of the design in lieu of a class diagram. It is clear to see what happens in every possible system event from start up, error handling to shutdown procedures. I like how you addressed the concerns of risks for the system. Hypothetically if I was your customer I may like to know what exactly an CSRF attack is in addition to layout of your mitigation strategies. Overall, I think it is a well constructed, organized document that is easy to read and meets specifications."

*Group 7 Responses*

*Chris Breen: Nothing actionable.*

*Ben Brandhorst: No response.*

Stephanie Lightner:

"The feature diagram does a decent job of showing the design's static view, instead of a class diagram. Overall, I think it's a well-constructed, structured, easy-to-read document that meets requirements. The sign of the shutdown cycle is hard to see. I recommend captioning your images of the event-trace with the scenario they are referencing."

*Group 7 Responses*

*Chris Breen: Feedback appears to belong to a different groups project. Shutdown diagram is the largest of all scenarios and all event-trace diagrams already have captions indicating what scenario they belong to already.*

*Ben Brandhorst: Agree with Chris Breen. I am not sure what Stephanie is referring to.*

Stephen Masterson: No Feedback

Zachary Finnegan:

"I found the documents to be really professional looking and thorough. I did have two items that were not clear to me. Maybe they are covered in a different document. Anyway see below:

Username error handling: This document says that an invalid username will have the effect of creating a new game with the username being "Anonymous." What exactly is considered an invalid username in this instance? Are players required to use unique usernames? If yes then there will need to be a login system. If usernames are not required to be unique it seems unlikely that an invalid username could be created. To my knowledge.

Difficulty settings: The document says that an invalid difficulty setting selection will result in the page essentially reloading and the player is asked to enter a different difficulty setting. This seems weird to me. How are players entering difficulty settings? The only way I can think of an invalid difficulty setting being created would be if the user manually types in a difficulty setting and it isn't one that is provided. Wouldn't it make more sense to just have a drop down menu or buttons with the only available difficulty settings so the user can only pick a valid difficulty setting?"

#### *Group 7 Responses*

*Chris Breen: Username is both stored in the database and redisplayed in HTML on the leaderboard.html page, making it susceptible to multiple injection type attacks. Per the ICD it must contain 4-20 word characters (a-z, A-Z, 0-9, underscore) or spaces. Failing this RegEx test sets the username to 'Anonymous'. Player names are not required to be unique but can definitely be invalid from a security perspective. Difficulty settings also falls under security controls. Newgame.html does indeed provide radio buttons to choose the difficulty level, and an integer of 1-5 is passed to the backend, but POST data, as well as JavaScript session data, can easily be tampered with by the user. Since difficulty levels are used in database queries, database storage, and HTML output, this becomes another injection attack vector and must be sanitized. Design updated to elaborate on security purpose. Complete*

*Ben Brandhorst: Agree with updating design to clarify security purpose.*

## Week 6: Test Plan & ICD

### Stephanie Lightner

"I really liked how you executed your value range. That was a valuable contribution and it was noticeable. I also thought it was smart to have multiple requirements for each test case. I have no suggestions this week."

### *Group 7 Responses*

*Chris Breen: Nothing actionable.*

### Zachary Finnegan

"Ok, so I really don't have anything constructive to say. It's better than I could make and it's made by people who know what they are doing so... Good job! It is really good and thorough! Didn't even find any spelling mistakes."

### *Group 7 Responses*

*Chris Breen: Nothing actionable.*

### Nick Groth

"My past few weeks I had to really scrub hard to find anything I'd recommend changes to, and this week I really could not find anything. Even like Zack said, I looked for grammar or spelling mistakes and could not even find one. You all are absolutely killing this assignment, keep up the great work and let me know if there is ever anything I can give input on or test out."

### *Group 7 Responses*

*Chris Breen: Nothing actionable.*

Stephen Masterson: No Feedback