***EE/CprE/SE 491 WEEKLY REPORT 04***

***February 14, 2022 – February 18, 2022***

***Group number: SDDEC22\_20***

***Project: Implement the i281 CPU in Hardware***

***Client &/Advisor:*** [Alexander Stoytchev](mailto:alexs@iastate.edu)

***Team Members/Role:***

| **Member** | **Role** | | |
| --- | --- | --- | --- |
| [Alex Kiefer](mailto:atkiefer@iastate.edu) | Project Manager | Lead Hardware Designer |  |
| [Saffron Edwards](mailto:saffrone@iastate.edu) | Software Testing Manager | Website Manager |  |
| [David Vachlon](mailto:dvachlon@iastate.edu) | Hardware Testing Manager | Secondary Documenter | Purchasing Manager |
| [Patrick O'Brien](mailto:pcobrien@iastate.edu) | Documentation Manager | Meeting Scribe | Secondary Hardware Designer |
| [Joseph De Jong](mailto:jdejong@iastate.edu) | Communications Manager | Secondary Hardware Tester | Secondary Hardware Designer |

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### Weekly Summary

*Weekly Objective: Complete i281 Clock*

This week was focused on planning moving forward. We spent our Tuesday meeting deciding how to share the work on the CPU. We decided to give each member an individual component to work on. This includes creating a schematic and building the component. To finish the entire computer each member will need to build 2 components. Listed below is the planned component for each member.

| **Member** | **Component** |
| --- | --- |
| [Alex Kiefer](mailto:atkiefer@iastate.edu) | Register File |
| [Saffron Edwards](mailto:saffrone@iastate.edu) | OP Code Decoder and Instruction Set |
| [David Vachlon](mailto:dvachlon@iastate.edu) | OP Code Decoder and Instruction Set |
| [Patrick O'Brien](mailto:pcobrien@iastate.edu) | ALU |
| [Joseph De Jong](mailto:jdejong@iastate.edu) | Data Memory |

### Weekly Accomplishments

#### Weekly Accomplishments Summary

This week was focused on organization. We got our materials in, got a space in the senior design lab, organized the google drive, planned tasks, and did some other group maintenance.

#### Weekly Completed Tasks

| **Task Name** | **Members Involved** | **Due Date** |
| --- | --- | --- |
| Got in CPU components | All | Feb 18 |
| Delegated tasks | All | Feb 18 |

#### Overall Completed Tasks

| ***Task Name*** | ***Members Involved*** | ***Due Date*** |
| --- | --- | --- |
| Build and Map Clock System | Alex, Patrick, Joseph | Feb 11 |

### Meetings Summary

The team met on Tuesday to discuss and pick assignments. Tasks were divided to complete the weekly objective. The team met with the Client on Friday to work on planning. More info can be found in the Meeting Notes folder.

### 

### Current Agenda

| **Task Name** | **Members Involved** | **Due Date** |
| --- | --- | --- |
| Design and Schematics for Each Module | All | Spring Break |
| Source Extra Parts for each module | All | Feb 25 |
| Test bus multiplexors | Alex | Feb 25 |
| Source 2t1 Multiplexors | David, Patrick | Feb 25 |
| Test 7 segment displays for function | Joseph, Patrick | Feb 25 |
| Register Testing | Alex | Feb 25 |
| Memory Testing | Joseph | Feb 25 |
| Adder Testing | Patrick | Feb 25 |
| Find EEPROM Reader | David, Saffron | Feb 25 |
| Pong game speed | All | Feb 18 |
| Update Website | Saffron, Joseph | Feb 18 |
| Watch CPU Videos | All | - |
| Learn Altium | All | - |

### Pending issues

| **NAME** | **Issue** |
| --- | --- |
| Group |  |
| [Alex Kiefer](mailto:atkiefer@iastate.edu) |  |
| [Saffron Edwards](mailto:saffrone@iastate.edu) |  |
| [David Vachlon](mailto:dvachlon@iastate.edu) |  |
| [Patrick O'Brien](mailto:pcobrien@iastate.edu) |  |
| [Joseph De Jong](mailto:jdejong@iastate.edu) |  |

### Individual Contribution

| **NAME** | **Individual Contributions** | **Hours this**  **week** | **HOURS**  **cumulative** |
| --- | --- | --- | --- |
| [Alex Kiefer](mailto:atkiefer@iastate.edu) | Clock Implementation, Planned Meetings | 6 | 25 |
| [Saffron Edwards](mailto:saffrone@iastate.edu) | Website | 5 | 21 |
| [David Vachlon](mailto:dvachlon@iastate.edu) | Collected materials | 5 | 21 |
| [Patrick O'Brien](mailto:pcobrien@iastate.edu) | Adder Implementation | 8 | 25 |
| [Joseph De Jong](mailto:jdejong@iastate.edu) | Website, Group Work and Reports | 8 | 24 |