**Project Team: Team 6**

**MXB328 Weekly Project and Meeting Notes**

**Project Team:** Annabel Mclean (AM), Laura Davis-Poynter (LD), Olivia Ryan-McInally (OR),

Zander Hook (ZH)

**Client Team:** James Dowdeswell (JD), Steve Psaltis (SP), Ian Turner (IT), Richard Sargeant (RS)

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| **Week 9**  **Weekly Log:** This week we had submitted our completed interim reports and project management plans and we received feedback on these submissions that our team was able to take into consideration to fix up these comments. We were able to gain valuable feedback from our stakeholders, Ian, Steve, James, and Richard. From here our team is moving the focus from the interim and project management side of the project to focus on the MATLAB and coding aspects of this assignment. This is so that we can get our coded model working and begin to progress through the analysis portion of the assignment. Looking further into the future we have the presentations coming up and this week we had the incredible opportunity to be presented with a “how to make an engaging and convincing presentation?” workshop from Keith Alexander. At the end of this workshop we also had time to create a brief presentation about our project so far a receive feedback from another member of the SSG (student success group). This was an excellent chance to prepare for our presentation coming up. | | | | | |
| **Workshop Attendees:** | **Consultation Attendees:** | | | **Friday Team Meeting Attendees:** | |
| AM, LD, OR, ZH | AM, LD, OR, ZH | | | AM, LD, OR, ZH | |
| **Recap (Week 8 Tasks)** | | | | | |
| **Item** | | | **Progress** | | |
| Implement the discretisation into MATLAB | | | Completed | | |
| Improve accuracy of rainfall model | | | Averaged Fourier transform completed, will further this for severe weather events | | |
| Model the bucket problem | | | In progress | | |
| Continue to update MS Project file | | | In progress | | |
| Finish team log 2 for submission | | | Completed | | |
| All members to watch lectures on Chapter 2 from IT | | | In progress | | |
| **Task Allocation** | | | | | |
| **Item** | | **Comments** | | | **Action By / Due** |
| Improve accuracy of rainfall model | | Create flood condition models | | | OR / End of Week 11 |
| Model the bucket problem | | Need to fix code so that measured matches expected line | | | ALL / End of Week 11 |
| Continue to update MS Project file | |  | | | OR AM / Ongoing |
| **Individual Work Log** | | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |

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| **Mid Semester Break**  **Brief update for over the break:** Throughout the mid semester break we continued to focus on the coding aspect of the assignment and also prepared the rainfall model further so that when the code was working adequately the rainfall could be implemented into this. Improving the code was our focus for the duration of the mid semester break. | | | | |
| **Workshop Attendees:** | **Consultation Attendees:** | | **Friday Team Meeting Attendees:** | |
| AM, LD, OR, ZH | AM, LD, OR, ZH | | AM, LD, OR, ZH | |
| **Task Allocation** | | | | |
| **Item** | | **Comments** | | **Action By / Due** |
| Continue progressing through MATLAB code | | Ongoing | | ALL |
| **Individual Work Log** | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 12 | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 12 | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 12 | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 12 | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | |

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| **Week 10**  **Weekly Log:** Our team used this week to consult with the teaching team regarding the code development to gain their insight on debugging our code. This was very helpful as the main remaining tasks for this project are all code related. | | | | | |
| **Workshop Attendees:** | **Consultation Attendees:** | | | **Friday Team Meeting Attendees:** | |
| AM, LD, OR, ZH | AM, LD, OR, ZH | | | AM, LD, OR, ZH | |
| **Recap (Week 9 Tasks)** | | | | | |
| **Item** | | | **Progress** | | |
| Improve accuracy of rainfall model | | | Continued progress | | |
| Model the bucket problem | | | In progress | | |
| Continue to update MS Project file | | | Up to date but this task is ongoing | | |
| **Task Allocation** | | | | | |
| **Item** | | **Comments** | | | **Action By / Due** |
| Improve accuracy of rainfall model using Fourier series approximation | | Cosine and constant rainfall already implemented for averaged data and flood year | | | OR / end of week 12 |
| Model the bucket problem | |  | | | ZH / end of week 12 |
| Implement GMRES | | Adapting code from MXB326 project | | | ZH LD / end of week 12 |
| Continued organisation of tasks | |  | | | AM / end of week 12 |
| **Individual Work Log** | | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |

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| **Week 11**  **Weekly Log:** This week we had a consult with James where the teams were able to ask questions regarding the specifics of the project in terms of groundwater movement and other analysis questions. This Q&A session was an excellent opportunity to gain some further insight into our project and better consult with our industry partner, GHD on behalf of James. We also prepared for the possible project management discussion with Richard however, we weren’t one of the teams selected for this. Regardless, it was good to remain up to date on all aspects of the project including the organisational and management side of things. We also found out our presentation timeslot 1.30pm 26/10 so made additional preparations and library bookings so that we would be ready for this. | | | | | |
| **Workshop Attendees:** | **Consultation Attendees:** | | | **Friday Team Meeting Attendees:** | |
| AM, LD, OR, ZH | AM, LD, OR, ZH | | | AM, LD, OR, ZH | |
| **Recap (Week 10 Tasks)** | | | | | |
| **Item** | | | **Progress** | | |
| Improve accuracy of rainfall model using Fourier series approximation | | | Ongoing | | |
| Model the bucket problem | | | Ongoing | | |
| Implement GMRES | | | Completed | | |
| Continued organisation of tasks | | | Ongoing | | |
| **Task Allocation** | | | | | |
| **Item** | | **Comments** | | | **Action By / Due** |
| Implement adaptive time stepping | |  | | | ZH / end of week 12 |
| Implement GMRES using SVD | |  | | | LD AM / end of week 12 |
| Improve rainfall models based on previous feedback | |  | | | OR / end of week 12 |
| Fix up PMP | |  | | | AM OR / end of week 13 |
| Fix up interim report | |  | | | AM LD / end of week 13 |
| **Individual Work Log** | | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 12 | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | |

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| **Week 12**  **Weekly Log:** This week was our last workshop and consultation with Ian, Steve, and Jesse. These final sessions were a very valuable opportunity to confirm that our solution was working as expected. We also made plans to split the groups main priority so Laura and Zander continued work on the code development and Annabel and Olivia began the analysis so that this was ready for the presentation to the project board. | | | | | | | |
| **Workshop Attendees:** | **Consultation Attendees:** | | | | **Friday Team Meeting Attendees:** | | |
| AM, LD, OR, ZH | AM, LD, OR, ZH | | | | AM, LD, OR, ZH | | |
| **Recap (Week 11 Tasks)** | | | | | | | |
| **Item** | | | **Progress** | | | | |
| Implement adaptive time stepping | | | Completed | | | | |
| Implement GMRES using SVD | | | Completed | | | | |
| Improve rainfall models based on previous feedback | | | In progress | | | | |
| Fix up PMP | | | Completed | | | | |
| Fix up interim report | | | Completed | | | | |
| **Task Allocation** | | | | | | | |
| **Item** | | **Comments** | | | | **Action By / Due** | |
| Banded Jacobian | |  | | | | ALL / end of week 12 | |
| Debug GMRES | |  | | | | ALL / end of week 12 | |
| Include Eisenstat-Walker forcing term | |  | | | | LD / end of week 13 | |
| Finalise rainfall models | |  | | | | OR / end of week 13 | |
| Write script | |  | | | | ALL / 26.10 | |
| Make visual presentation | |  | | | | ALL / 26.10 | |
| **Individual Work Log** | | | | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 24 | | | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 24 | | | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 24 | | | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 24 | | | | | | | |
| * Attended workshop * Attended consultation * Attended team meeting (Friday) | | | | | | | |
| **Week 13**  **Weekly Log:** This week was the week of our final presentations, so it was a very busy week. It also meant that there were no workshops or consultations with IT or JM. We decided to dedicate Monday to completing the final analysis and writing all our speeches. This meant that Tuesday morning, early, we were able to practise our speeches all together with our visual aid all complete. Our team also organised to have a uniform so LD and AM got shirts and lettering so that our company’s name could be displayed on our uniform. This gave our team a sense of cohesion and meant that the presentation could be done professionally and of high quality. The rest of the week was spent finalising the analysis and writing our final report. Individually we all worked through our sections and our reflections.  As our maths degree comes to an end, we are so grateful that we had the opportunity to work with such an incredible team. Steve, James, Jesse, Richard, and Ian have all been so supportive and encouraging throughout this project. We have genuinely enjoyed this whole process as challenging as it was at the end of the day it was all very worth it. | | | | | | | |
| **Final Presentation Attendees:** | | | | **Monday Team Meeting Attendees:** | | | |
| AM, LD, OR, ZH | | | | AM, LD, OR, ZH | | | |
| **Recap (Week 12 Tasks)** | | | | | | | |
| **Item** | | | **Progress** | | | | |
| Banded Jacobian | | | Completed | | | | |
| Debug GMRES | | | Completed | | | | |
| Include Eisenstat-Walker forcing term | | | Completed | | | | |
| Finalise rainfall models | | | Completed | | | | |
| Write script | | | Completed | | | | |
| Make visual presentation | | | Almost completed | | | | |
| **Task Allocation** | | | | | | | |
| **Item** | **Comments** | | | | | | **Action By / Due** |
| Prepare for presentation | Finish visual aids  Finish speech preparation | | | | | | ALL / Tuesday |
| Present speech | Received great feedback from all members of the project board. Need to include code runtimes and focus on quality management for project management sections | | | | | | ALL / 1.11 |
| Continue analysis | Need to run a few more simulations then can load this data to save figures for report. | | | | | |  |
| Write report sections | Each section of report has been allocated to all team members this will be written by due date | | | | | | ALL / 1.11 |
| Finish individual reflections | Individual work, all members will dedicate some time for this piece of assessment | | | | | | ALL / 31.10 |
| Proofread of final report | All members will go through the final report and proofread this to ensure that it is of quality and ready for submission | | | | | | ALL / 1.11 |
| Finish team logs |  | | | | | | OR / 31.10 |
| Improve efficiency of the code’s runtimes | Improved significantly from 10 minutes per 5 years to mere minutes to run 5 years. These times will be outlines in the final report | | | | | | ZH / 30.10 |
| **Individual Work Log** | | | | | | | |
| **AM Individual Work Log:** Hours worked on project this week = 36 | | | | | | | |
| * Attended workshop * Attended consultation * Meeting Monday 1pm – 10pm (running simulations and preparing for presentation) * Meeting Tuesday 8.30am – 1.30pm (practising presentation for our pitch) * Presentation for the board 1.30pm – 2pm | | | | | | | |
| **LD Individual Work Log:** Hours worked on project this week = 36 | | | | | | | |
| * Attended workshop * Attended consultation * Meeting Monday 1pm – 10pm (running simulations and preparing for presentation) * Meeting Tuesday 8.30am – 1.30pm (practising presentation for our pitch) * Presentation for the board 1.30pm – 2pm | | | | | | | |
| **OR Individual Work Log:** Hours worked on project this week = 36 | | | | | | | |
| * Attended workshop * Attended consultation * Meeting Monday 1pm – 10pm (running simulations and preparing for presentation) * Meeting Tuesday 8.30am – 1.30pm (practising presentation for our pitch) * Presentation for the board 1.30pm – 2pm | | | | | | | |
| **ZH Individual Work Log:** Hours worked on project this week = 36 | | | | | | | |
| * Attended workshop * Attended consultation * Meeting Monday 1pm – 10pm (running simulations and preparing for presentation) * Meeting Tuesday 8.30am – 1.30pm (practising presentation for our pitch) * Presentation for the board 1.30pm – 2pm | | | | | | | |