**BIS4620** Assessment 1 **(Individual Crypto-Currency Investigation)**

The following table provides an overview of the assessment requirements

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| **Assessment Brief – Crypto-Investigation**  |
| **Formatives****Key Dates****When and where to submit the summative assessment** | **LW14 – (21st January 2021).** Formative 1 will take place in the allocated lab sessions **LW18 – (18th February 2021).** Formative 2 will take place in the allocated lab sessions **LW120 – (4th March).** Formative 3 **presentation** will take place in the allocated lab sessions. Presentations should be 10 minutes long with 5 minutes for questions. **Where to submit**Online submission via Turnitin. **LW23 Summative Report and Presentation slides due 22nd March 2021** **LW23 – (25th March 2021).** Summative presentations will take place in allocated lab sessions - presentations should be 10 minutes long with 5 minutes for questions. Please ensure a copy of your presentation is printed to be handed to the lecturer before the presentation commences. Submission consists of:1. One investigation report
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| **Feedback type & date**  | Feedback for all formatives 1,2.3 will be provided online. Feedback for formative 1 and 2 is given on the work provided by the students for feedback. Therefore, it is in the student’s interest to prepare and present work completed so far for this feedback. Formative 3 is based on the presentation. **Students are expected to keep cameras on for this activity.**Summative feedback for the report will be available in 15 days after the date of submission. |
| **Word count** | The assessment is limited to a maximum of 3500 words. This excludes references and supplementary material (Contemporaneous notes).  |
| **Assignment structure, format and details** | **The final report should contain: -** 1. Technical report
2. Contemporaneous notes taken during investigation element
3. References (academic, guidelines and standards)

**Section A is the investigation report**. 80 marks**Section B is the presentation**. 20 marks**Total marks for assessment are 100****Section A - (80 marks)**As a newly trained cryptocurrency investigator, you are working in the fraud investigation department of a regulated financial institution. Your manager has set you a task to evaluate the report of a cryptocurrency scam, where several clients were targeted and directed to pay criminals. Based on your skill to investigate and produce a report for this task, your manager will decide whether you can work unsupervised on future cases.Your manager has provided you with the bitcoin address (below) that was reported by clients as being involved in the scam. He has asked you to look at additional information posted on the public Bitcoin Abuse Database, which can be accessed via <https://www.bitcoinabuse.com/>.

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| --- | --- |
| **Address** | *1GLWLdAczAxYex1WphmhF27qdDgtvLK7yz* |
| **Report Count** | 23 |
| **Latest Report** | Wed, 16 Dec 20 16:34:55 +0000(11 minutes ago) |
| **Total Bitcoin Received** | 0.00982089 BTC |
| **No. Transactions Received** | 1 |

Your task is to:1. Investigate the address and findings related to it
2. Produce a timeline of events
3. Gather intelligence on the address
4. Produce an internal report for the fraud department on the type of scam this is and what to do if another similar scam arises
5. You should also identify next steps that should be taken

Due to the lack of knowledge on cryptocurrencies in the department your manager has requested that your report should provide some explanation how bitcoin links to financial crime.**Section B - (20 marks)**Students are expected to produce a presentation that discusses the results of their investigation, methods and processes used. Students may use visual aids (slides, diagrams) during the presentation. Students can include the techniques that were used and how leads were found from the initial information that was provided. Student are expected to be able to take questions regarding the investigation and Bitcoin. The presentation should be **15** minutes in length. |
| **Assessed learning outcome (s)** | This coursework will assess all learning outcomes. *Knowledge* 1. Critically examine various digital evidence collection and seizure procedures and assess their efficacy in the context of constantly changing digital technologies and examine the standard procedures for launching a digital forensic investigation and articulate the possible limitations in the context of constantly changing technologies.
2. Demonstrate an in-depth knowledge of the use of investigative guidelines and evidence management strategies in digital investigations.

*Skills* 1. Manage evidence and maintain a comprehensive audit trail for the production of reports and statements to be used in a court of law.
2. Use appropriate techniques and valid procedures to carry out digital forensic investigations on current and emerging technologies.
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| **Weight**  | The assessment is **60%** of the module assessment mark.  |
| **Key reading and learning material** | Lectures slides are available on Moodle with additional reading resources and online resources. |
| **Assessment marking criteria**

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| Assessment Criteria | Marks (100) |
| Preparation* Considerations of evidence management
* Collection of evidence and its management
* Provide reasoning for tools selected together with reflection on validation of results
* Demonstrate research conducted into information provided
* Consideration for audit documentation and contemporaneous notes
 | 20 |
| Investigation and analysis* Detailed planning with logical investigative techniques
* Validating findings with blockchain explorer
* Discovery of relevant transactions
* Demonstration of open-source research
* List of potential leads for further investigation
* Evidential merit of information
 | 30 |
| Internal Departmental Information* Information on the scam
* Bitcoin and financial crime
* Updates or new learnings for fraud prevention
* Challenges to investigation
* Challenges in confirming identities of users and limitations of investigation
 | 20 |
| LayoutA suggested layout for the report is as follows.* Summary of report and details of chronological forensic steps
* Findings / discoveries from investigation
* Visuals of timeline
* Conclusion with a clear direction of the decision made based on the investigation findings
* References

Grammar and English should be suitable for a professional report | 10 |
| Presentations – This assessment has one presentation for students Content should be at an appropriate level for a professional audience * Presentation slides are required to be submitted prior to student presentation with the main report - **2 marks**
* During the presentation student camera and audio is required to be switched on - **2 marks**
* Content in slides should be provide the visual background to case - **2 marks**
* Findings clearly stated -**4 marks**
* Timing should be maintained (15 minutes in length) - **2 marks**
* Challenges and difficulties in the investigation should be discussed in a
* professional manner **– 4 marks**
* Answering directed questions **– 4 marks**

Below is an indication of what areas the student may wish to cover. * + To provide an overview of work carried out
		- Investigation plan
		- Useful resources
		- Findings
		- Discovery of information and the techniques employed
		- Challenges and difficulties

These presentations will take place in **Learning week 23.** Students are required to be available online and present a prepared presentation. At the presentation students can expect to be questioned on their presentation by members of the audience (students). Presentations will be conducted in the presence of fellow students. | 20 |

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The following table details the support you will be receiving for this assessment and the feedback opportunities you will have.

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| Support and draft feedback sessions for Investigation assessment |
| **Coursework briefing** The coursework will be explained to students and lab practice work will support learning. |
| **Draft feedback opportunities** Feedback will be provided in the lab session.  |
| **Additional support** Should extra support be required please contact the lab tutor and or the module leader via details provided in the module handbook.  |