

System Design for Financial Track

EECS3311 N

Financial Track (Group 10)

Sprint 1

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CRC Cards

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|--|--|
| Class Name: User | |
| Parent Class: None Subclasses: None | |
| Responsibilities: <ul style="list-style-type: none">• Create a new user account• Authenticate user login• Store and manage user credentials securely• Retrieve user profile information | Collaborators: <ul style="list-style-type: none">• Database• Authentication |

| | |
|---|--|
| Class Name: Transaction | |
| Parent Class: None Subclasses: None | |
| Responsibilities: <ul style="list-style-type: none">• Store income and expense details• Categorize expenses (e.g., food, rent)• Allow users to edit/delete transactions | Collaborators: <ul style="list-style-type: none">• User• Budget |

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|--|---|
| Class Name: Budget | |
| Parent Class: None Subclasses: None | |
| Responsibilities: <ul style="list-style-type: none">• Manage user-defined budget• Track remaining balance• Recalculate when transactions change• Support switching between weekly/monthly views | Collaborators: <ul style="list-style-type: none">• User• Transaction |

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|---|--|
| Class Name: Report | |
| Parent Class: None Subclasses: None | |
| Responsibilities: <ul style="list-style-type: none">● Generate financial summary● Display visual summaries | Collaborators: <ul style="list-style-type: none">● Budget● User● Transaction |

| | |
|--|---|
| Class Name: Authentication | |
| Parent Class: None Subclasses: None | |
| Responsibilities: <ul style="list-style-type: none">● Handle user login/logout● Verify user credentials● Ensure secure password storage and validation | Collaborators: <ul style="list-style-type: none">● User |

Software Architecture Diagram

