

Demo: Requirements Catalogue

RepoDoc

Archimedes

Contents

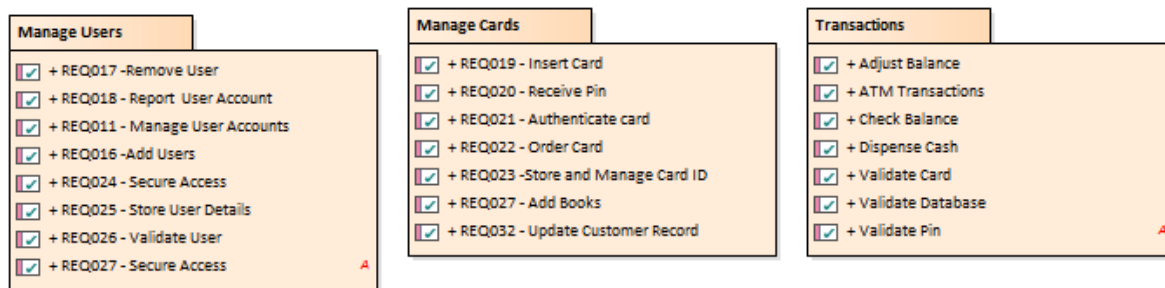
About Archimetes RepoDoc	3
Functional Requirements	3
Batch Process Class System (Package)	3
Transactions (Package)	4
Manage Cards (Package)	4
Manage Users (Package)	4
Nightly Batch Process	4
Batch Process Class System	4
Transaction (Class)	4
UI (Class)	5
Customer (Class)	5
Account (Class)	5
Program (Class)	5
Manage Users	5
<Functional>REQ027 - Secure Access (Requirement)	5
<Functional>REQ016 -Add Users (Requirement)	6
<Performance>REQ026 - Validate User (Requirement)	6
<Functional>REQ017 -Remove User (Requirement)	6
<Functional>REQ024 - Secure Access (Requirement)	7
<Functional>REQ018 - Report User Account (Requirement)	7
<Functional>REQ025 - Store User Details (Requirement)	7
<Functional>REQ011 - Manage User Accounts (Requirement)	7
Manage Cards	7
Note (Note)	7
<Functional>REQ032 - Update Customer Record (Requirement)	8
<Functional>REQ021 - Authenticate card (Requirement)	8
<Functional>REQ027 - Add Books (Requirement)	8
<Functional>REQ023 -Store and Manage Card ID (Requirement)	8
<Functional>REQ022 - Order Card (Requirement)	9
<Functional>REQ019 - Insert Card (Requirement)	9
<Functional>REQ020 - Receive Pin (Requirement)	9
Transactions	9
<Functional>Validate Pin (Requirement)	10
<Functional>Validate Database (Requirement)	10
<Functional>Validate Card (Requirement)	10
<Functional>Dispense Cash (Requirement)	10
<Functional>Adjust Balance (Requirement)	10
<Functional>ATM Transactions (Requirement)	11
<Functional>Check Balance (Requirement)	11

About Archimetes RepoDoc

This document was generated by RepoDoc, a documentation tool for Sparx Systems Enterprise Architect. The document is based on the LaTeX Requirements Catalogue template for RepoDoc and demonstrates a complete documentation of an UML model from the this banking-requirements.xml repository that is part of the Introduction to Sparx Systems Cloud Services - Official webinar from Sparxsystem.com. Follow these steps to generate a LaTeX source file using the LaTeX RepoDoc template or visit www.archimetes.com to learn more about RepoDoc.

Functional Requirements

Package Diagram - Functional Requirements



Class Design

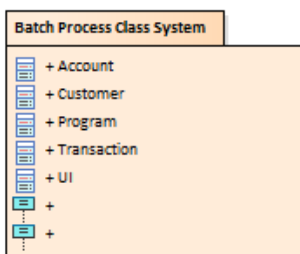


Figure 1: Functional Requirements

Table 1: List of the elements

Element Code	Stereotype	Difficulty	Project Phase
Batch Process Class System		Easy	1.0
Transactions		Easy	1.0
Manage Cards		Easy	1.0
Manage Users		Easy	1.0

Batch Process Class System (Package)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere,

turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

Transactions (Package)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

Manage Cards (Package)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

Manage Users (Package)

The manage users package houses all the requirement that are involved in managing users

Nightly Batch Process

Batch Process Class System

Table 2: List of the elements

Element Code	Stereotype	Difficulty	Project Phase
Transaction		Easy	1.0
UI		Easy	1.0
Customer		Easy	1.0
Account		Easy	1.0
Program		Easy	1.0

Transaction (Class)

Class representing real banking transaction. The transaction means physical or virtual financial operation with all its attributes like date of transaction, type of transaction and amount of money on banking account.

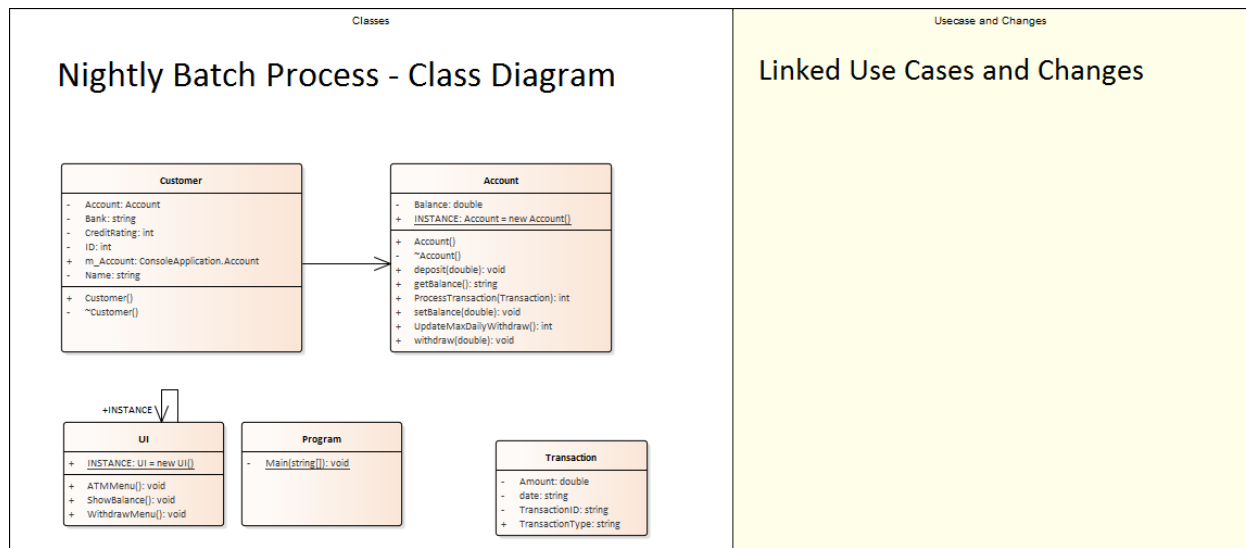


Figure 2: Batch Process

UI (Class)

Class representing user interface of ATM.

Customer (Class)

Class representing physical person or the organization for which the banking account created and served.

Account (Class)

The Class representing real banking account withh all its attributes

Program (Class)

Class representing the computing program

Manage Users

The manage users package houses all the requirement that are involved in managing users

<Functional>REQ027 - Secure Access (Requirement)

All user access is to be secure and encrypted.

Requirements

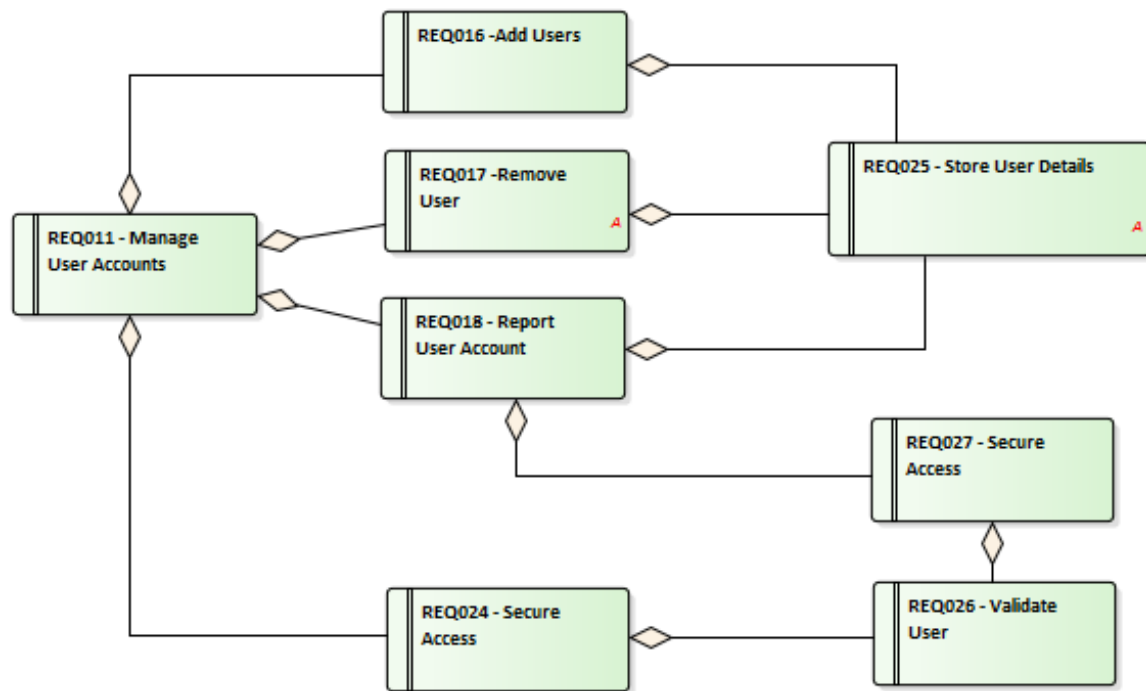


Figure 3: Manage Users

<Functional>REQ016 -Add Users (Requirement)

It must be possible to add new users to the client repository.

<Performance>REQ026 - Validate User (Requirement)

The system must provide for secure access and user validation via pin and password. The Pin is to be provided by system. The user may change their password according to a set of defined rules.

<Functional>REQ017 -Remove User (Requirement)

It is required that users within the repository may be deleted if required. If the user has existing transactions against their account, the delete is a logical delete only.

Table 3: List of the elements

Element Code	Stereotype	Difficulty	Project Phase
REQ027 - Secure Access	<Functional>	Easy	2
REQ016 -Add Users	<Functional>	Easy	3.0
REQ026 - Validate User	<Performance>	Easy	2
REQ017 -Remove User	<Functional>	Easy	1.0
REQ024 - Secure Access	<Functional>	Easy	1.0
REQ018 - Report User Account	<Functional>	Easy	2.0
REQ025 - Store User Details	<Functional>	Easy	2.0
REQ011 - Manage User Accounts	<Functional>	Easy	2.0

<Functional>REQ024 - Secure Access (Requirement)

All user access is to be secure and encrypted.

<Functional>REQ018 - Report User Account (Requirement)

A report is required covering all details of a user's account including current open transactions, transaction history and activity.

<Functional>REQ025 - Store User Details (Requirement)

User details must be persisted to a relational database

<Functional>REQ011 - Manage User Accounts (Requirement)

The system is required to store and maintain a list of client accounts in a persistent repository.

Manage Cards

Table 4: List of the elements

Element Code	Stereotype	Difficulty	Project Phase
Note		Easy	1.0
REQ032 - Update Customer Record	<Functional>	Easy	3.0
REQ021 - Authenticate card	<Functional>	Easy	3.0
REQ027 - Add Books	<Functional>	Easy	3.0
REQ023 -Store and Manage Card ID	<Functional>	Easy	2.0
REQ022 - Order Card	<Functional>	Easy	2.0
REQ019 - Insert Card	<Functional>	Easy	1.0
REQ020 - Receive Pin	<Functional>	Easy	1.0

Note (Note)

Formal Requirements definitions for the "Manage Inventory" functionality

Requirements

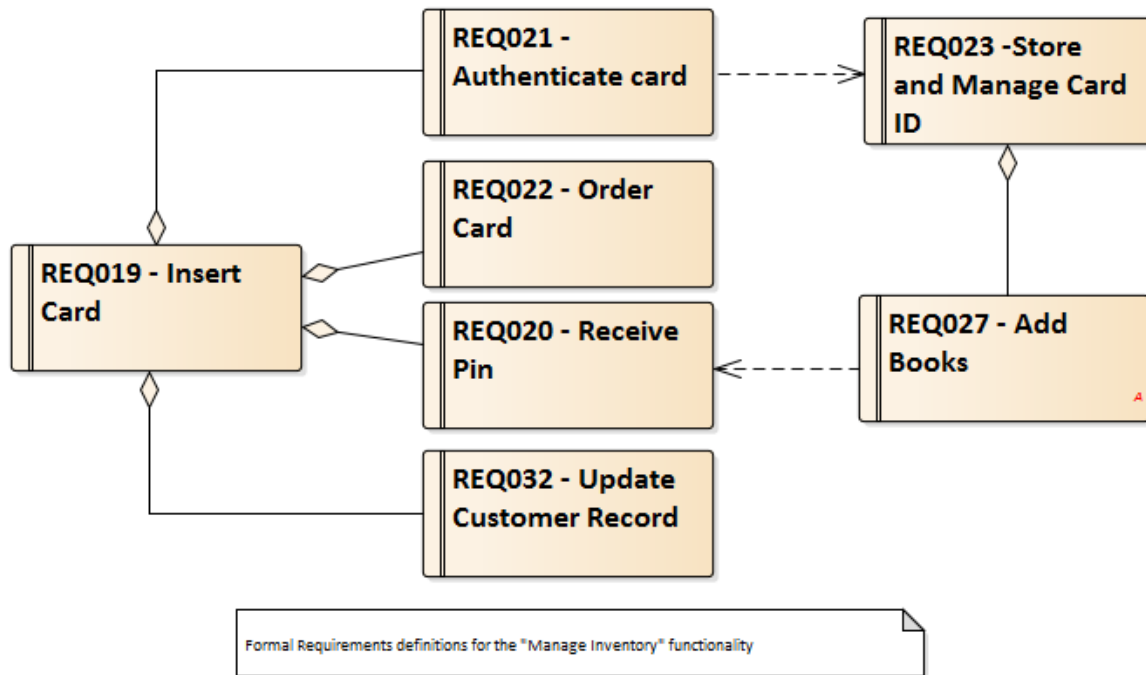


Figure 4: Manage Inventory

<Functional>REQ032 - Update Customer Record (Requirement)

Update Customer record on magnetic strip

<Functional>REQ021 - Authenticate card (Requirement)

Authenticate magnetic strip, session ID and card security features.

<Functional>REQ027 - Add Books (Requirement)

A facility will be required to receive and add books to the stocklists.

<Functional>REQ023 -Store and Manage Card ID (Requirement)

A card ID storage and management facility will be required.

<Functional>REQ022 - Order Card (Requirement)

A card order facility will be required to allow lost and stolen cards to be replaced in a timely fashion.

<Functional>REQ019 - Insert Card (Requirement)

The system allocates an ATM session identifier to enable errors to be tracked and synchronized between the ATM and the Bank System. The card must be authenticated prior to processing

<Functional>REQ020 - Receive Pin (Requirement)

Each bank card must receive a private pin number, to be mailed out to the customer.

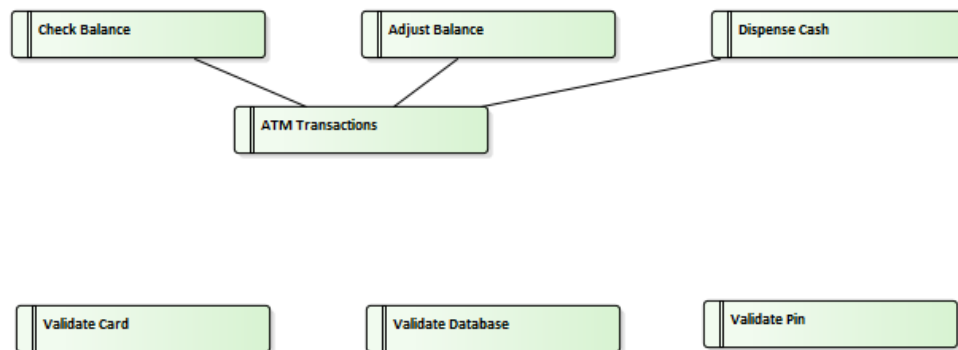
Transactions

Figure 5: Withdraw Funds

Table 5: List of the elements

Element Code	Stereotype	Difficulty	Project Phase
Validate Pin	<Functional>	Easy	1.0
Validate Database	<Functional>	Easy	1.0
Validate Card	<Functional>	Easy	1.0
Dispense Cash	<Functional>	Easy	1.0
Adjust Balance	<Functional>	Easy	1.0
ATM Transactions	<Functional>	Easy	1.0
Check Balance	<Functional>	Easy	1.0

<Functional>Validate Pin (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>Validate Database (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>Validate Card (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>Dispense Cash (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>Adjust Balance (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>ATM Transactions (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

<Functional>Check Balance (Requirement)

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.