

2 Diagrama Casos de Uso – Cuentas por cobrar

2.22 El digrafo para el caso de uso “Cuentas por cobrar” .dot es:

```
digraph esq {
    rankdir=TB
    node [shape=box]

    // Actores
    DCC [label="Departamento\\nCuentas por Cobrar\\n(Principal)"]
    Cliente [label="Cliente\\n(Principal)"]
    SisFact [label="Sistema Facturación\\n(Externo)"]
    SisCont [label="Sistema Contable\\n(Externo)"]

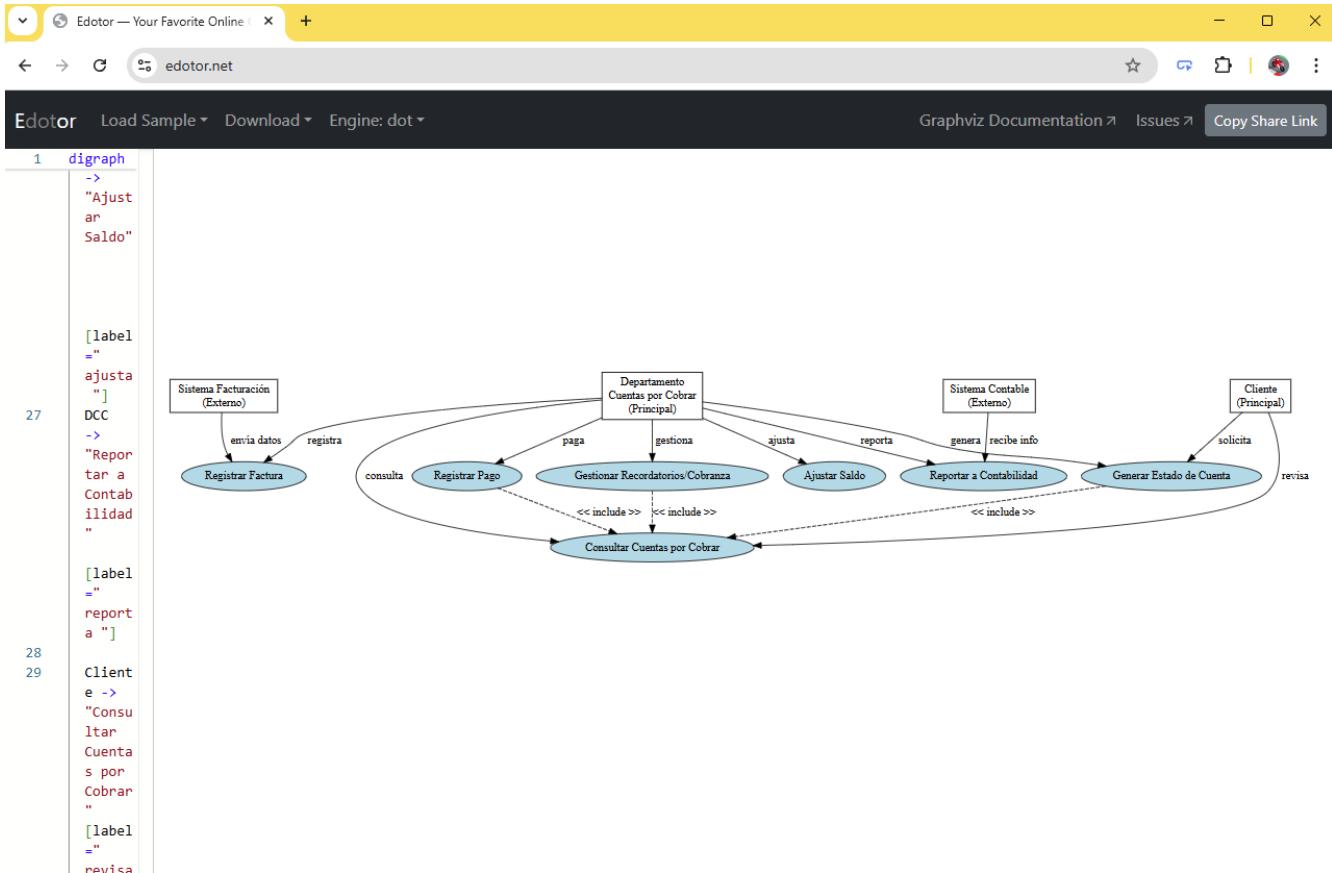
    node [shape=ellipse, style=filled, fillcolor=lightblue]
    "Registrar Factura"
    "Consultar Cuentas por Cobrar"
    "Registrar Pago"
    "Generar Estado de Cuenta"
    "Gestionar Recordatorios/Cobranza"
    "Ajustar Saldo"
    "Reportar a Contabilidad"

    // ASOCIACIONES con etiqueta descriptiva
    DCC -> "Registrar Factura" [label=" registra "]
    DCC -> "Consultar Cuentas por Cobrar" [label=" consulta "]
    DCC -> "Registrar Pago" [label=" paga "]
    DCC -> "Generar Estado de Cuenta" [label=" genera "]
    DCC -> "Gestionar Recordatorios/Cobranza" [label=" gestiona "]
    DCC -> "Ajustar Saldo" [label=" ajusta "]
    DCC -> "Reportar a Contabilidad" [label=" reporta "]

    Cliente -> "Consultar Cuentas por Cobrar" [label=" revisa "]
    Cliente -> "Generar Estado de Cuenta" [label=" solicita "]

    SisFact -> "Registrar Factura" [label=" envía datos "]
    SisCont -> "Reportar a Contabilidad" [label=" recibe info "]

    // INCLUDE
    "Registrar Pago" -> "Consultar Cuentas por Cobrar" [label="<< include >>", style=dashed]
    "Generar Estado de Cuenta" -> "Consultar Cuentas por Cobrar" [label="<< include >>", style=dashed]
    "Gestionar Recordatorios/Cobranza" -> "Consultar Cuentas por Cobrar" [label="<< include >>", style=dashed]
}
```



Y el SVG generado por kimi del mismo grafo es:

```

<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<svg xmlns="http://www.w3.org/2000/svg"
      width="900" height="720" viewBox="0 0 900 720">

    <style>
        .actorP { fill:#fff; stroke:#d32f2f; stroke-width:3; }
        .actorE { fill:#fff; stroke:#757575; stroke-width:1.5; }
        .uc { fill:#e3f2fd; stroke:#0366d6; stroke-width:2; }
        .line { stroke:#000; stroke-width:1.5; fill:none; }
        .dash { stroke-dasharray:6,4; stroke:#424242; stroke-width:1.5; fill:none; }
        .label { font-family:Arial, sans-serif; font-size:12px; fill:#000; text-anchor:middle; }
        .stereo { font-family:Arial, sans-serif; font-size:11px; fill:#424242; font-weight:bold; }
    </style>

    <!-- ACTORES -->
    <circle cx="70" cy="60" r="12" class="actorP"/> ...
    <!-- resto igual que antes -->
    <!-- CASOS DE USO -->
    <ellipse cx="400" cy="60" rx="80" ry="20" class="uc"/><text x="400" y="65" class="label">Registrar Factura</text>

```

```

<ellipse cx="400" cy="120" rx="80" ry="20" class="uc"/><text x="400" y="125"
class="label">Consultar Ctas. x Cobrar</text>
<!-- ... resto de elipses ... -->

<!-- ASOCIACIONES etiquetadas (Graphviz ya colocó los textos) -->
<!-- DCC -->
<path d="M 82 60 C 200 60 320 60 320 60" class="line"/>
<text x="235" y="55" class="label">registra</text>
<path d="M 82 120 C 200 120 320 120 320 120" class="line"/>
<text x="235" y="115" class="label">consulta</text>
<path d="M 82 180 C 200 180 320 180 320 180" class="line"/>
<text x="235" y="175" class="label">paga</text>
<path d="M 82 240 C 200 240 320 240 320 240" class="line"/>
<text x="235" y="235" class="label">genera</text>
<path d="M 82 300 C 200 300 320 300 320 300" class="line"/>
<text x="235" y="295" class="label">gestiona</text>
<path d="M 82 360 C 200 360 320 360 320 360" class="line"/>
<text x="235" y="355" class="label">ajusta</text>
<path d="M 82 420 C 200 420 320 420 320 420" class="line"/>
<text x="235" y="415" class="label">reporta</text>

<!-- Cliente -->
<path d="M 82 220 C 150 220 250 170 320 120" class="line"/>
<text x="190" y="175" class="label">revisa</text>
<path d="M 82 220 C 150 220 250 230 320 240" class="line"/>
<text x="190" y="235" class="label">solicita</text>

<!-- Sistemas externos -->
<path d="M 82 380 C 200 380 320 60 320 60" class="line"/>
<text x="235" y="215" class="label">envía datos</text>
<path d="M 82 520 C 200 520 320 420 320 420" class="line"/>
<text x="235" y="470" class="label">recibe info</text>

<!-- INCLUDE (ya con arcos curvos y etiquetas) -->
<path d="M 400 200 C 400 170 400 150 400 140" class="dash"/>
<text x="400" y="165" class="stereo">&lt;&lt; include &gt;&gt;</text>

<path d="M 400 260 C 400 230 400 150 400 140" class="dash"/>
<text x="400" y="195" class="stereo">&lt;&lt; include &gt;&gt;</text>

<path d="M 400 320 C 400 280 400 150 400 140" class="dash"/>
<text x="400" y="225" class="stereo">&lt;&lt; include &gt;&gt;</text>
</svg>
```

SVG Viewer - View, edit, and op x +

svgviewer.dev

SVGViewer

Search SVGs

Line 1:0

```

37    <text x="235" y="415" class="label">reporta</text>
38
39    <!-- Cliente -->
40    <path d="M 82 220 C 150 220 250 170 320 120" class="line"/>
41    <text x="190" y="175" class="label">revisa</text>
42    <path d="M 82 220 C 150 220 250 230 320 240" class="line"/>
43    <text x="190" y="235" class="label">solicita</text>
44
45    <!-- Sistemas externos -->
46    <path d="M 82 380 C 200 380 320 60 320 60" class="line"/>
47    <text x="235" y="215" class="label">envía datos</text>
48    <path d="M 82 520 C 200 520 320 420 320 420" class="line"/>
49    <text x="235" y="470" class="label">recibe info</text>
50
51    <!-- INCLUDE (ya con arcos curvos y etiquetas) -->
52    <path d="M 400 200 C 400 170 400 150 400 140" class="dash"/>
53    <text x="400" y="165" class="stereo">&lt;&lt; include &gt;&gt;&lt;&lt; include &gt;&gt;&lt;&lt; include &gt;&gt;

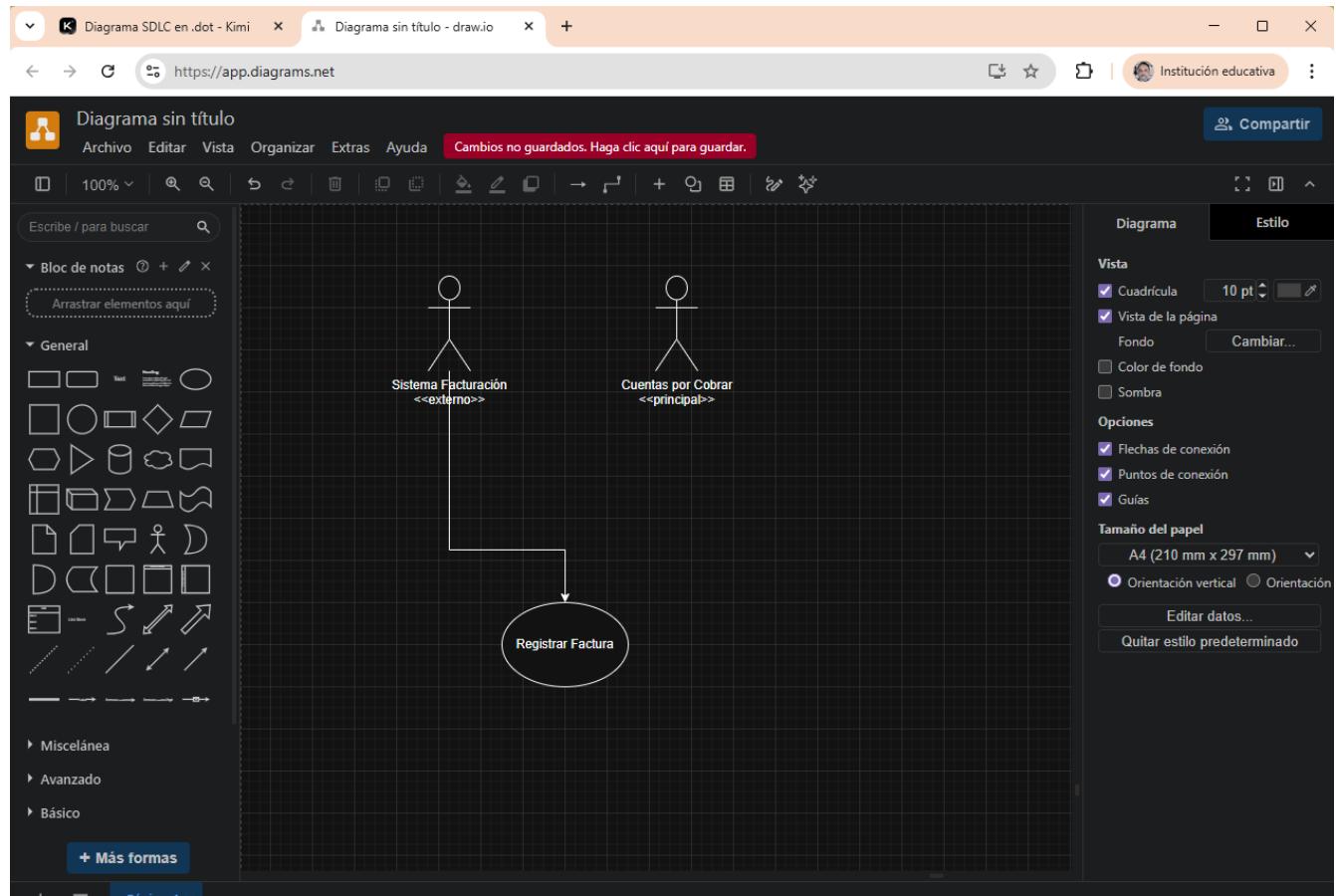


The diagram illustrates a sequence of interactions between a client and various external systems. It features two main participants: a red circle representing the client and several blue ovals representing external systems. 
  - The client initiates a 'registra' message to the 'Registrar Factura' system.
  - The client sends a 'consulta' message to the 'Consultar Ctas. x Cobrar' system.
  - The 'Consultar Ctas. x Cobrar' system returns a 'paga' message to the client.
  - The client sends an 'envia datos' message to the 'solicita' system.
  - The 'solicita' system sends a 'gestiona' message back to the client.
  - The client sends an 'ajusta' message to the 'gestiona' system.
  - Finally, the 'gestiona' system sends a 'reporta' message back to the client, which then receives 'info'.

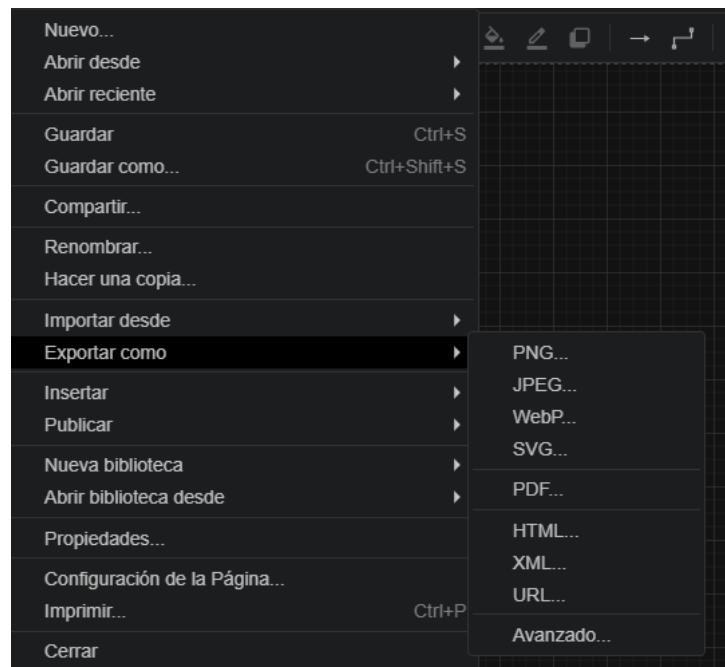

```

Lo que obviamente es incorrecto. crear El caso de Uso cuentas por cobrar usando la herramienta <https://app.diagrams.net> a mano siguiendo el digrafo anterior.

a) Completar:



(b) Exportar a SVG y generar el código necesario HTML con KIMI para una página HTML-SVG y subir a Github



← **Primer Parcial** →